

Cited in the European Search
Report of EP 93 93 377.3
Your Ref.: PH-676 RT-EP

①



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 5 : C12N 15/11, C12Q 1/68	A2	(11) International Publication Number: WO 93/16178 (43) International Publication Date: 19 August 1993 (19.08.93)
(21) International Application Number: PCT/US93/01294 (22) International Filing Date: 12 February 1993 (12.02.93) (30) Priority data: 07/837,195 12 February 1992 (12.02.92) US (71) Applicant: THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US). (72) Inventors: VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US).		(74) Agents: ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US). (81) Designated States: AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT (57) Abstract Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	FR	France	MR	Mauritania
AU	Australia	GA	Gabon	MW	Malawi
BB	Barbados	GB	United Kingdom	NL	Netherlands
BE	Belgium	GN	Guinea	NO	Norway
BF	Burkina Faso	GR	Greece	NZ	New Zealand
BG	Bulgaria	HU	Hungary	PL	Poland
BJ	Benin	IE	Ireland	PT	Portugal
BR	Brazil	IT	Italy	RO	Romania
CA	Canada	JP	Japan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SK	Slovak Republic
CI	Côte d'Ivoire	LI	Liechtenstein	SN	Senegal
CM	Cameroon	LK	Sri Lanka	SU	Soviet Union
CS	Czechoslovakia	LU	Luxembourg	TD	Chad
CZ	Czech Republic	MC	Monaco	TG	Togo
DE	Germany	MG	Madagascar	UA	Ukraine
DK	Denmark	ML	Mali	US	United States of America
ES	Spain	MN	Mongolia	VN	Viet Nam
FI	Finland				

**SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION
PRODUCT**

5

Technical Field

The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

10

Background

This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

15

There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

20

25

30

-2-

in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. The nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types of molecules are referred to generally herein as polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the message (anticodon). The term codon is also used for the corresponding (and complementary) sequences of three nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an

-3-

enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries all the information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second strand. The linear DNA molecules in chromosomes have thousands of genes distributed along their length. Chromosomes include both coding regions (coding for polypeptides) and noncoding regions; the coding regions represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

-4-

respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

5 A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, an uninterrupted polypeptide-coding sequence, and a 3' untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. The untranslated regions typically have many, randomly-distributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. The 5'-untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

20 The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

30 Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

-5-

5 The ability of one strand of DNA to attach or hybridize
to a complementary strand has already been exploited for
several purposes. For example, small pieces of DNA (15 to 25
base pairs long) can be made which will hybridize to longer
strands of DNA which have a complementary sequence. These
short "primers" can be selected such that they hybridize to
a specific, unique location on the longer strand. Once the
primers have hybridized to their target on the DNA, the
polymerase chain reaction (PCR) can be employed to generate
10 millions of copies of (or amplify) the particular segment of
DNA between the locations to which two primers are bound.
Briefly, this technique allows amplification of a DNA region
situated between two convergent primers, using
oligonucleotide primers that hybridize to opposite strands.
15 Primer extension proceeds inward across the region between
the two primers, and the product of DNA synthesis of one
primer serves as a template for the other primer. Repeated
cycles of DNA denaturation, annealing of primers, and
extension result in an exponential increase in the number of
20 copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can
be hybridized to a longer DNA sequence, such as a chromosome,
to mark a specific location on the longer sequence. Segments
of DNA 50 bases long or longer that hybridize to a unique DNA
25 location in the human genome are extremely unlikely to
hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all
human DNA (the human genome). The human genome is estimated
to comprise 50,000 - 100,000 genes, up to 30,000 of which
30 might be expressed in the brain (Sutcliffe, *Ann. Rev.*
Neurosci. 11:157 (1988)). Once dedicated human chromosome
sequencing begins in three to five years, it was expected
that 12-15 years will be required to complete the sequence of
the genome (Report of the Ad Hoc Program Advisory Committee
on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed.
35 (NIH, Bethesda, Md, 1988)). At that rate, the majority of

-6-

human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. The coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total DNA. In contrast, cDNA (which is only made from the transcription product of active genes) is one-half to three-fourths (the remainder being 5'- and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

Genomic sequencing proponents have argued the difficulty of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

- 7 -

corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., *Nature* 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

- 8 -

regions and coding regions of chromosomes is of significant interest. There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, forensic identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, whether through mutation, deletion, or faulty gene expression) on the chromosome.

SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed *in vivo*. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

- 9 -

mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSS) (Olson et al., *Science* 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

-10-

examples are provided to demonstrate and exemplify numerous aspects of the invention.

I. ESTs from cDNA Libraries

5 The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. In general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously
10 randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone selection. According to the present method, ESTs are generated from partial DNA sequencing of the selected clones.
15 The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing reaction. While single sequencing reactions may have an accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR
20 primers.

 Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few
25 specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method
30 called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

 Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome
35 (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express

-11-

the protein-coding exons of the human gene of interest. Exon trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. Exon amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been mapped. The exon amplification method can be used directly with the cosmid and YAC clones from human chromosomes that are being obtained by both NIH and DOE supported human genome centers. ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, EST-derived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

-12-

long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known β -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) is present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

-13-

desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other useful preprocessing techniques include subtraction, which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., *Nucl. Acids Res.* 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately equal proportions in the library (Patanjali et al, *Proc. Natl. Acad. Sci. USA* 88:1943 (1991)).

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

-14-

sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

II. Complete Coding Sequences from ESTs

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. Suitably stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete gene sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

-15-

of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and whether the sequence is completely coding or completely non-coding. If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.

2. Radiolabel the isolated insert DNA, e.g., with ³²P labels, preferably by nick translation or random primer labeling.

3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

-16-

4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.

5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5 6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full
10 length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript,
15 followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

20 ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with P^{32} using polynucleotide kinase using labelling methods known to those with skill in the art. (Basic Methods in Molecular Biology, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The
25 lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing
30 the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The
35 ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

-17-

the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R., Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., *Methods*: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

-18-

Gocayne, J.D., Ward, D.C., and Venter, J.C. *Genomics* 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, the polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. The sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the specific polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).

-19-

The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be in purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). The conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately 10^6 -fold purification of the native message. Purification of starting material or

-20-

natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

5 In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This
10 can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be
15 used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences.
20 Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in
25 addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 ESTs (and corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of
30 this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

III. DNA Constructs

35 The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

-21-

a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including
5 for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example.

10 **Bacterial:** pBs, phagescript, ϕ X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).
Eukaryotic: pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

15 Promoter regions can be selected from any desired gene using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda P_R, and trc. Eukaryotic promoters include CMV immediate early, HSV
20 thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

25 In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host
30 cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., **Basic Methods in Molecular Biology**, (1986)).

35 The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

-22-

can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

-23-

Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) are presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTs have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific cDNA libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

-24-

Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., *Human Chromosomes: a Manual of Basic Techniques*. Pergamon Press, New York (1988).

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, *Mendelian Inheritance in Man* (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

-25-

the mutation is likely to be the causative agent of the disease.

5 With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

10 Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the
15 presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or
20 RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, Nucl. Acids Res. 6: 3073 (1979); Cooney et al, Science
25 241: 456 (1988); and Dervan et al, Science 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, J. Neurochem. 56: 560 (1991); Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression, CRC Press, Boca Raton, FL (1988)). Triple
30 helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the
35 present invention is necessary for the design of an antisense or triple helix oligonucleotide.

-26-

The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect.
5 high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

The sequences of the present invention, as broadly defined, are also useful for identification of individuals from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on
10 a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional
15 DNA markers for RFLP.
20

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare
25 PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST.
30 These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA
35 sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to

-27-

obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

5 The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in the noncoding regions. It is estimated that allelic variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared for identification purposes. Because greater numbers of polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

15 If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

25 Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ α class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

-28-

(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ α class II HLA gene.

5 The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. Those sequences targeted to noncoding regions (see, e.g., Tables 8 and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

10 There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

V. Production of Polypeptide Corresponding to ESTs

15 As previously explained, each EST corresponds not only to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

20 At the simplest level, the amino acid sequence encoded by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

-29-

particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

Alternatively, the DNA encoding the desired polypeptide
5 can be inserted into a host organism and expressed. The organism can be a bacterium, yeast, cell line, or multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA)
10 can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response against a foreign polypeptide. Wolff, et al., *Science* 247:1465 (1990); Felgner, et al., *Nature* 349:351 (1991).
15 Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

20 Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will
25 then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide.
30 Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

VI. Examples

35 Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

-30-

EXAMPLE 1

cDNA Sequences Determined by Random
Clone Selection: First set

5

METHODOLOGY:

With reference to the data presented in Table 1, lambda ZAP libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, respectively. Stratagene, 11099 N. Torrey Pines Rd., La Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below) In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1.

Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5 μ l fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5 μ M each dNTP, and 0.1 μ M each primer for 35 cycles: 94°C, 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. Qiagen™ columns improved the percentage of plasmid templates, increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

-31-

universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, *Nature* 347: 310 (1990) hereby incorporated by reference).

RESULTS:

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by another library. (Schmid and Girou, *Neurochem.* 48: 307 (1987); Fargnoli et al, *Anal. Biochem.* 187: 364 (1990); Duguid and Dinauer, *Nucl. Acids. Res.* 18: 2789 (1990); Schweinfest, et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Travis and Sutcliffe, *Proc. Natl. Acad. Sci. USA* 85: 1696 (1988); Kato, *Eur. J. Neurosci.* 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, *Genet. Anal. Techn. Appl.* 7: 64 (1990); Sive and St. John, *Nucl. Acids Res.* 16: 10937

-32-

(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOs 1-315.

TABLE 1. cDNA Library Composition Determined
By Random Clone Sequencing

EST Category	Hippocampus		Hippocampus Subtracted		Fetal Brain		Temporal Cortex	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Databases Match--Human	48	12.8	10	8.6	3	7.9	6	7.5
Mitochondrial Genes	39	10.4	14	12.2	6	15.8	0	0
Repeats: Alu, Line-1, etc.	10	2.7	7	6.0	0	0	11	13.8
Ribosomal RNA	32	8.6	7	6.0	4	10.5	0	0
Other Nuclear Genes	32	8.6	7	6.0	5	13.2	4	5.0
No Database Match	160	42.8	44	37.9	20	52.6	6	7.5
poly A Insert	53	14.1	24	20.7	0	0	27	33.7
No Insert	1	0.3	3	2.6	0	0	26	32.5

- 33 -

-34-

EXAMPLE 2

Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing reactions, and automated sequencing were performed as described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. *Science*, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. *Nucl. Acids Res.* 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al *Science* 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. *Science*

-35-

216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. *Nature* 316: 359-361 (1985); Fanning, T. G. & Singer, M. F. *Biochem. Biophys. Acta* 910: 203-212 (1987)) were searched against all of GenBank and, in 6-frame translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. *Mol. Biol.* 215: 403-410 (1990)) server at the National Center for Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene family identification (Barker, W., George, D., Hunt, L., & Garavelli, J. *Nucl. Acids Res.* 19 (Suppl): 2231-2236 (1991)) for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. ATCC accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base expressed D-segment numbers for these clones are D0S1E - D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOs 316-2407.

-36-

EXAMPLE 3

EST Characterization: First Set

ESTs including SEQ ID NOs 1-315 were analyzed as follows. Initially, the EST sequences were examined for similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library, Fuchs R. Comput. Appl. Biosci. 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology Information) ESTs without exact GenBank matches were translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide (BLASTX) comparisons (Altschul et al, J. Mol. Biol. 215: 403 (1990)). PIR searches were run on the National Center for Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Pegarson and Lipman, Proc. Natl. Acad. Sci. USA, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

-37-

After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase $F_0\beta$ -subunit and porcine aconitase were also found (Table 2). Brain-specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. At least six ESTs are from genes encoding proteins involved in signal transduction: 2',3'-cyclic nucleotide 3'-phosphodiesterase (2 ESTs), calmodulin, c-erbA- α -2, $G_s\alpha$, and Na^+/K^+ ATPase α -subunit. Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and

-38-

fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight
5 ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

10 ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the
15 database. Some patterns, particularly the "leucine zipper", are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes,
20 including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and Drosophila (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved
25 in organelle transport in the squid giant axon (Vale et al, Cell 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102)
30 matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an S. cerevisiae RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270
35 matched the three β -tubulin genes with 88-91% identity and

-39-

EST00271 (SEQ ID NO:248) matched α -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the *Drosophila* genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the *Drosophila* genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing *Drosophila* embryo (Campos-Ortega, *Trends in Neuro. Sci.* 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. *J. Mol. Biol.* 215: 403 (1990)). EST00256 (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein β subunit- and yeast *cdc4*-like elements (Hartley et al, *Cell* 55: 785 (1988); Klambt et al. *EMBO J.* 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the *cdc10*/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the *Xenopus* Notch homolog, Xotch. In *Drosophila*, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, *Neuron* 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST: β -

-40-

actin (3), λ -actin (2), α -tubulin (2), α -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

Example 4

EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOs 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as *E. coli*, yeast, *C. elegans*, *Drosophila*, barley, *Arabidopsis*, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., *supra*), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in *Drosophila* are represented by similar human ESTs, including seven in *absentia* (Carthew, R. & Rubin, G. Cell 63: 561-577 (1990)),

-41-

big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. *Nature* 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. *Cell* 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. *Genes. Dev.* 4: 1516-1527 (1990)). New members of gene families previously known in humans include a Ca^{+2} -transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. *Proc. Natl. Acad. Sci. USA* 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

-42-

Table 2: ESTs Identified by Database Matches

SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID
208	EST00250	60K filarial antigen	A28209	PIR	108	56.9
2320	EST01784	60K filarial antigen	A28209	PIR	88	50.6
969	EST01982	ADP-ribosylation factor 1	B33283	PIR	84	41.2
1834	EST01620	AMP deaminase, brain	A37056	PIR	57	100.0
97	EST00289	Aconitase	A35544	PIR	105	90.6
251	EST00370	Actin, ether	S10021	PIR	44	51.1
248	EST00271	Actinin, alpha	HUMACTAR	GB	271	85.3
851	EST01891	Actinin, alpha	HUMACTAR	GB	315	81.6
1500	EST02538	Actinin, alpha	HUMACTAR	GB	271	75.0
132	EST00110	Agrin	RATAGR	GB	269	82.2
1852	EST01625	Agrin	RATAGR	GB	103	84.6
1094	EST02113	Ala	HUMALA	GB	92	82.8
691	EST00675	Alcohol dehydrogenase	RICGOS2G_1	GPU	38	59.0
2438	EST00244	Amyloid A4	HUMAFPA4	GB	135	91.9
1955	EST01664	Amyloid A4	A29030	PIR	52	54.7
2068	EST01694	Amyloid A4	ORHUA4	PIR	83	69.0
2092	EST01700	Anion exchanger homolog AE3	A33638	PIR	95	97.9
1880	EST01634	Axonal glycoprotein TAG-1	A34695	PIR	69	87.1
1492	EST02530	B cell-specific Mo-MLV integration site 1 (bmi-1)	MUSBMI1A	GB	111	87.5
1277	EST02306	Bib protein	S09699	PIR	57	53.4
13	EST00255	Cadherins	CAONSHUMAN	SP	41	45.2
1348	EST02378	cAMP-dependent protein kinase inhibitor	MUSPK1	GB	234	91.5
1931	EST01041	cAMP-regulated phosphoprotein	B35308	PIR	21	86.4
1413	EST02447	cAMP-specific phosphodiesterase	HUMPDEAA	GB	363	69.0
396	EST01443	CDPdiacylglycerol-serine O-phosphatidyltransferase	JH0368	PIR	33	41.2
1956	EST01663	Ca2+-transporting ATPase 2	B28065	PIR	125	88.9
1126	EST02146	Calbindin D28	RATCALBD28	GB	81	87.8
1039	EST02055	Calcium channel	S05054	PIR	33	67.6
1910	EST01645	Calmodulin	RATRCM1	GB	120	90.1
485	EST01466	Calmodulin-dependent protein kinase, type II, beta	A26464	PIR	93	98.9
913	EST01913	Clathrin coat assembly protein AP50 homolog	YSCYAP54_1	GPU	62	63.5
2004	EST01676	Cofilin	PIGCOFIL	GB	132	89.5
2400	EST01824	Cysteine-rich intestinal protein	GYRT1	PIR	56	66.7
1588	EST02633	D2223 repetitive DNA	HUMREP	GB	160	76.4
2192	EST01257	Diacylglycerol kinase, lymphocyte	S09156	PIR	44	42.2
1441	EST02477	Diamine acetyltransferase	ATDASHUMAN	SP	74	45.3
650	EST00642	Dilute (myosin heavy chain)	MUSDILUTE_1	GPU	27	100.0
2302	EST01779	Discs-large tumor suppressor	DRODLGA_1	GPU	53	63.0
188	EST00256	Enhancer of split	A30047	PIR	86	58.6
2289	EST01325	Fatty acid synthase	RATFAS	GB	98	79.8
310	EST00377	Fo ATPase beta subunit, mitochondrial	BOVMTAS8	GB	293	85.4
1332	EST02362	GA binding protein, beta subunit	MUSGAC_1	GPU	86	90.8
1667	EST00825	Gamma-aminobutyric acid transporter	A35918	PIR	26	59.3
2217	EST01738	Gelation factor ABP-280	A37098	PIR	74	80.0
1412	EST02446	Glutamate-aspartate carrier protein	JV0092	PIR	57	37.9
1020	EST02034	Glutaminase	GLSSRAT	SP	34	74.3
1885	EST01639	Histocompatibility antigen modifier 1	A37779	PIR	63	75.0
1495	EST02533	Hypothetical 43.5K protein	JU0319	PIR	43	52.3
2326	EST01791	Inositol-1,4,5-trisphosphate 3-kinase	JN0129	PIR	65	68.2
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

SUBSTITUTE SHEET

- 43 -

724	EST01529	Interferon-induced 54K protein	INI4\$HUMAN	SP	76	70.1
1035	EST02051	J1 protein	MUSJ1PRO	GB	362	85.7
1229	EST02258	KUP protein	HUMKUPMR_1	GPU	54	36.4
993	EST02007	Kinase 5 protein	CHKCEK5_1	GPU	68	94.2
77	EST00257	Kinesin	A35075	PIR	57	86.2
78	EST00258	Kinesin	A35075	PIR	62	47.6
2245	EST01748	Kinesin	A35075	PIR	98	52.5
2282	EST01764	Lamin B receptor	A36427	PIR	76	71.4
2173	EST01724	Lon protease	JO0901	PIR	103	41.3
1427	EST02463	Long-chain-fatty-acid-CoA ligase	A36275	PIR	36	62.2
313	EST00276	Lysosomal membrane glycoprotein 1 (LAMP-1)	A31959	PIR	53	46.3
161	EST00247	MARCKS (myristoylated alanine-rich protein kinase	BOVMARCKS	GB	139	83.6
1386	EST02418	MARCKS homolog	MMF52	EU	237	92.4
769	EST00734	MARCKS homolog	S08341	PIR	61	40.3
43	EST00371	Maternal G10 protein	S05955	PIR	38	92.3
1468	EST02505	Matrin 3	RATMATRIN3	GB	137	93.5
639	EST00632	Membrane transport superfamily (GTP-dependent)	A24400	PIR	63	39.1
1894	EST01643	Membrane transport superfamily (GTP-dependent)	A24400	PIR	71	50.0
824	EST01865	Microtubule-associated protein 1B	RATNEU	GB	293	86.4
223	EST00368	Microtubule-associated protein 1B	A33645	PIR	30	54.8
2032	EST01683	Microtubule-associated protein 1B	A33645	PIR	49	62.0
2017	EST01678	Milk fat globule membrane protein	A36479	PIR	48	61.2
1704	EST01580	Myeloid differentiation primary response gene MyD1	MUSMYD118_1	GPU	76	88.3
2226	EST01744	NAD(P)+ transhydrogenase (B-specific)	DEBOXM	PIR	86	93.1
1567	EST02610	Neural cell adhesion molecule L1	S05479	PIR	82	43.4
506	EST01471	Neuraxin	S06017	PIR	120	84.3
1566	EST02609	Neutrophil oxidase factor	A34855	PIR	43	47.7
952	EST01961	Notch/Xotch	HUMTAN1_1	GPU	85	57.0
227	EST00259	Notch/Xotch	A35844	PIR	74	85.3
1395	EST02429	Nuclear factor 1-like protein (NF1)	HAMNF1A	GB	111	92.0
1681	EST01573	Nucleoside diphosphate kinase	A33386	PIR	71	52.8
346	EST01828	Old homeotic protein	A35912	PIR	35	52.8
2254	EST01751	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase	A28807	PIR	40	90.2
1869	EST00992	Polymyxin B resistance	A32714	PIR	20	76.2
93	EST00287	Processing enhancing protein	S03968	PIR	96	58.8
2353	EST01806	Prohibitin	RATPROHIB_1	GPU	120	97.5
2297	EST01775	Prohormone cleavage enzyme	MUSMPC1A_1	GPU	91	93.5
9	EST00376	Prolyl endopeptidase	PIGPREP	GB	223	83.9
1069	EST02087	Protein kinase C, zeta	HUMPKCL	GB	382	58.7
1933	EST01650	Protein phosphatase 2A beta subunit	HUMPROP2A8	GB	288	76.8
202	EST00298	Protein-tyrosine phosphatase LRP	LRP\$MOUSE	SP	62	44.4
1654	EST01572	Protochlorophyllide reductase	S04783	PIR	34	57.1
38	EST00374	RNA polymerase II 6th subunit (RPO26)	A36352	PIR	72	75.3
1478	EST02515	Rab5	F34323	PIR	91	82.6
2368	EST01389	Radial spoke protein 3	S05962	PIR	58	52.5
37	EST00038	ras p21-like small GTP-binding protein (smg GDS)	BOVSMGGDS	GB	131	89.4
180	EST00299	ras-related proteins	S10493	PIR	51	46.1
1700	EST01579	Retrovirus-related gag polyprotein	FOHUE2	PIR	95	77.1
1511	EST02550	Retrovirus-related pol polyprotein	GNLJGL	PIR	50	54.9
102	EST00248	rho H12/ ARH12	BOVBGBRH	GB	195	79.6
1715	EST01583	Ribosomal protein L18a	R5RT18	PIR	68	95.7
SEQ ID	EST#	Putative Identification	Accession	DB	Len	%ID

- 44 -

1856	EST01627	Ribosomal protein L1a	A24579	PIR	75	63.1
1974	EST01667	Ribosomal protein L3	JQ0771	PIR	74	80.0
301	EST00300	Ribosomal protein L30	R6RT30	PIR	57	96.5
27	EST00301	Ribosomal protein S10	R3RT10	PIR	66	97.0
2402	EST01826	Ribosomal protein S10	R3YM10	PIR	36	51.4
463	EST01459	Ribosomal protein YL10	S11581	PIR	40	68.3
1408	EST02442	Seven in absentia	A36195	PIR	46	80.8
299	EST00249	smg p25A GDP dissociation inhibitor	A35652	PIR	97	77.5
951	EST01960	Spectrin, beta	HUMSPTB	GB	268	67.7
2089	EST01699	Sperm membrane protein	A35981	PIR	52	58.5
2073	EST01697	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	44	100.0
2138	EST01715	Succinate dehydrogenase flavoprotein	BOVSDHFP1_1	GPU	49	92.0
430	EST00472	Synaptotagmin (p65)	SY65\$HUMAN	SP	27	53.6
1371	EST02402	Talin	MUSTALINR_1	GPU	79	81.2
1771	EST01601	Thiosulfate sulfurtransferase (rhodanese)	ROBO	PIR	65	81.8
300	EST00232	Transforming protein (db1)	TVHUB8	PIR	25	65.4
189	EST00282	trkB	A35104	PIR	33	67.6
653	EST01512	Tubulin, alpha	HUMTUBAG	GB	223	75.0
594	EST01490	Tubulin, beta	HUMTB25	GB	298	93.6
757	EST01542	Tubulin, beta	HUMTUBBM	GB	217	90.4
1245	EST02274	Tubulin, beta	A26561	PIR	105	88.7
1147	EST02169	Tyrosine kinase	HUMECK	GB	384	74.3
1701	EST00853	Unc-104	JN0114	NR	36	45.0
2121	EST01711	Valine-tRNA ligase	A29871	PIR	56	57.9
187	EST00152	Wilm's tumor-related protein	HUMQM	GB	228	99.6
1726	EST01588	XPR2 alkaline extracellular protease	B26955	PIR	88	46.1
249	EST00275	Zinc Finger Proteins	S06551	PIR	25	57.7
413	EST01446	Zinc Finger Proteins	S00754	PIR	45	60.9
469	EST01460	Zinc Finger Proteins	C32891	PIR	34	54.3
833	EST01560	Zinc Finger Proteins	S00754	PIR	105	67.0
1230	EST02259	Zinc finger proteins	S00754	PIR	71	62.5
1496	EST02534	Zinc finger proteins	A34612	PIR	50	45.1
2324	EST01352	Zinc Finger Proteins	S10397	PIR	29	56.7

SUBSTITUTE SHEET

-45-

There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the β -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. *Proc. Natl. Acad. Sci., USA* 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both a- and alpha-tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P., Ervin, S., Applegren, N., Wiest, L. & Pegg, A. *J. Biol. Chem.* 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. *Genomics* 7:491-502 (1990)).

EXAMPLE 5

Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3). Oligonucleotide primer pairs were designed from EST

-46-

sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology; Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

-47-

these regions are less likely to prime other members of a gene family or pseudogenes.

The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCi of a ³²P-labeled deoxycytidine triphosphate. The PCR was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., *Genomics* 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

-48-

The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

-49-

Table 3: Assignment of ESTs to Chromosomes by PCR

SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	1	CTGTTTGCAAGTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	1	GCCATTGTGCTGAATAGAGT	GTTAGTGTTCCTTAGCAAG
83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	1	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTAGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	1	CTTAATCACCTCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	1	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	1	TTAGAAGTGCCCATGGGAGG	TTTTAAGGCTCTGGAGTGT
141	EST00118	1	CTCAGAGAAACTTAGGTGAA	CTACAGAATCATTTACCAG
220	EST00372	1	AAGTTGCACATTGCCCAAGG	ATAGTACTGCAAGGTTATT
237	EST00187	1	TTACAAATTTCTCTTGACGC	CTGAAGGAGCACAGTTTCTC
242	EST00192	1	GGATCAGATAATCAAACAGG	GCCTTAGGATATGAATGCATA
259	EST00202	1	GCATCACAGTTTAACTGAGG	CTACATATTTGTGCCCTCCTT
269	EST00293	1	CTGTTGCTGTGCAGTAGCTT	CCTTTGACCCAGTGAACTT
299	EST00249	1	GATCATGCAGACGTAGATAT	CCAACCTCTGCCAGATCATT
1651	EST00810	1	TAGTCGCTGTAAGTTGATTC	GCTTTGCTGGATGCTTCATT
16	EST00021	2	CAGGCAAGTTTCTTCCAGGA	TCAGACCCATGGTCAGCTT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	CCCTCAGCTTAGGGGAATG
8	EST00234	2	TAGAAGGCACAACTATGTCCC	GGTTGAGGATTGGCTTTTAC
36	EST00037	2	AGCCAGAAGGCTGCTTAAAG	GCAGTGAACCACTACTCCTA
123	EST00106	2	GTCTAATTTGTAACCTTCAG	GATAGATTGTATAAGAAGCC
192	EST00155	2	GATTTATGTCTGGGAACATA	GCAGCATGTGAAAGAATGAT
200	EST00162	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
284	EST00216	2	CCTAAGAATTCTGTTGGCTC	GTCTGGCACATAATAGATTG
102	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTC
167	EST00138	3	AAACAGCTGCGGAGTACA	AAAGGATCCTCCACTCCAGA
12	EST00274	3	CCTAGCAAACCTCATAACAC	CATAAGTGAATGGACACAGG
60	EST00062	3	ACACATTAACGGTGCTGCAG	GGAATCAGCCCTTGAGGACT
77	EST00257	3	AAGCTCACAACGCAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093	3	ATTGAACTCTGTCAACAGTG	TGTAAAACAAAGGCCAAACT
108	EST00094	3	AL2 - GCAGGATGTCTCTTTGAG	AGCACACATTATCTACCACGGC
1706	EST00857	3	AL2 - GCAGGATGTCTCTTTGAG	CCAGCACACATTATCTACCACG
37	EST00038	4	AACCTCGCAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
6	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
37	EST00038	4	AL2 - GGAAGTACAGGATTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGCTAGTATCATCC
59	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAAGAATC
74	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGCAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAGAAGGTATG
1643	EST00803	5	GAGCGTTTAAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2 - TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2 - CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAAGG

SUBSTITUTE SHEET

- 50 -

SEQ ID	EST#	Chr	PRIMER #1	PRIMER #2
1	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTCTGACAACTTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCCTCAAACACTGCT
288	EST00219	6	ACTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTAACTGTTGA	TGAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2 - ACCCAGTTCTCAAAGACC	GGTTTACCATTTCAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTAGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTTCAGAACTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAG	CTTAATCATGGATTCTTCGT
1680	EST00838	7	AL2 - GTTCTTTCCAGGTATGC	TTGTTGGTACTGAGGAAGTGG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
134	EST00375	9	TCTGGGCTTCTGTGGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTGACGA	TTCCAGTGCCCTTTTGTCC
1645	EST00804	10	CTCCTTTGGGACAAACAAT	CCAACCCAAACATATTTCTA
20	EST00024	10	AGCTGTTCTCTGAGAGATGCA	CCTTGTGAAGAAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACTTTGG	CTAAGCATCTGCATGTCCAG
172	EST00142	10	TACTAGCATTCTTACTCTC	TATGCTGATTGTTTGCATC
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAAGTCTGTAGTGTCTTAAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCAGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTCC	TAGGGCCACCTCCAGTTTCT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTTCTGG
126	EST00109	11	AL2 - CTAACCACAACCCACACATG	CCTCAGCACAAGAGAAGAAATGG
7	EST00014	12	AAGTGTGCAACATAAATACTAG	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCTTCTGGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGTCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAACTTAGT
1664	EST00822	14	GGGTGAGAAATTAAGAGGTCT	GTTTCATCTCTAACTCCTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTT	GTCATGCTAGTAAACTTACAC
1689	EST00845	14	AL2 - AGGAGGAAGCTGAAATCC	GGAAGTCCATAAGAGACTCACC
95	EST00088	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACCTCT
33	EST00034	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
247	EST00279	16	TGGCTAGGGCAGGCCTTAAA	GAGAAGAATATCAAATGGGG
18	EST00373	16	CCATCTGTGTCCCAATTAAGC	AGGGAAGAAGTCTAGAGCGA
68	EST00068	17	CAAAGACGGGAGACGAATGA	AGTGGAACCGGTGGCCTATG
1652	EST00811	17	GAGCTGCATGTTGATAAGTA	TTGACTTAAGCTGACCTTAA
1702	EST00854	17	AL2 - TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00080	19	AGAGATGTCACTCCATTATC	CTATTCACCTTACTCAAGG
223	EST00368	19	CATCATGTGCGAGAGCGATT	TGGATGACCTGAGTCTGCAG
21	EST00025	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00168	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGCTCATTTCAGGAA
136	EST00113	20	AL2 - TCGGAGAAGTTGCAGTTTCTG	GTTAAAAGCTGTTAGACGGGGC
120	EST00103	22	CACTGACTGACTCCTCTTTA	GGAACCGTAACTCTCCATAG
313	EST00276	X	ATTGACCTTCAATGTAATAA	TTGGATTGGSCAAAATAG

SUBSTITUTE SHEET

-51-

<u>SEQ ID</u>	<u>EST#</u>	<u>Chr</u>	<u>PRIMER #1</u>	<u>PRIMER #2</u>
162	EST00133	X	ATGTGAGCATCTATACCTGC	AATGAAGGCATGAGAATAGG
1669	EST00827	X	CGGACAACTAGGATAAATGC	TACGCGTTTGAATGGCTTGA
1917	EST01029	X	GAATAGCATTATTAGCCAGT	GGACCTATTGGAGATCTACT
1708	EST00858	X	AL2-AAGGCGAGGATTATGTGC	TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

SUBSTITUTE SHEET

The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. ESTs were used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., *Genomics* 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (*supra*). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOS 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOS 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

EXAMPLE 6

Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. **FASEB**

-53-

J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

EXAMPLE 7

5 Alternative Technique for Mapping to Chromosomes
 Mapping of ESTs to chromosomes using fluorescence in situ
 hybridization

10 This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

15 0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO₂/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

20 The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

25 The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al., Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

30

-54-

The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOs 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., *Human Chromosomes: A Manual of Basic Techniques*. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

	SEQ ID	EST#	Map Location
	-----	-----	-----
15	A.	19	EST00023 6p
		22	EST00301 6p
		1894	EST01643 6p21
		1	EST00007 6q
		224	EST00356 6q
		288	EST00219 6q
20		162	EST00133 Xp11.21 - Xp21.2
		1917	EST01029 Xp11.21 - Xp21.2
		1669	EST00827 Xq26 - Xq27.1
		1899	EST01014 Xq28
25	B.	1880	EST01634 1q32
		485	EST01466 7p13
		506	EST01471 10q11.2
		396	EST01443 17q25

EXAMPLE 8

Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, *Nucleic Acids Research* 12: 387 (1984)).

-55-

5 The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

-56-

TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

<u>Bases from Primer</u>	<u>Mismatches/ Ambiguities</u> ⁺	<u>Gaps Insertions</u> ⁺	<u>Percent Deletions</u> ⁺	<u>Aligned Accurate</u>	<u>Bases</u>
101 - 200	1.45	0.18	0.19	98.2	8,800
201 - 300	1.72	0.25	0.11	97.9	8,130
301 - 400	2.07	0.98	0.37	96.6	5,404
>400	3.53	2.63	1.06	92.8	3,197

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. ⁺Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

SUBSTITUTE SHEET

EXAMPLE 9

Probability of ESTs Containing Coding Sequences

5 The ESTs of the present invention were statistically
evaluated using the coding-region prediction program CRM
via the GRAIL server (Uberbacher, E. & Mural, R. *Proc.*
10 *Natl. Acad. Sci. USA*, 88: 11261-5 (1991)). The CRM program
uses a neural network to combine results from several
different coding regions by looking at different 6 bp
sequences found in coding exons and in introns. The
15 program additionally conducts reading frame searches and
assesses randomness at the third position of codons. This
protocol categorizes sequences as having an excellent,
good, marginal, or poor probability of containing coding
regions. The results are reported in Tables 6-9. There
were 219 ESTs categorized as "excellent" (Table 6); 120
categorized as "good" (Table 7); 113 categorized as
"marginal" (Table 8); and 1743 categorized as "poor" (Table
9). These results indicate that most ESTs of the present
invention comprise noncoding regions.

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SEQ ID#	EST#				
7	EST00014	973	EST01987	1807	EST00941
15	EST00020	979	EST01993	1809	EST00943
48	EST00291	980	EST01994	1820	EST00951
62	EST00064	986	EST02000	1829	EST00958
66	EST00067	1000	EST02014	1849	EST00975
75	EST00074	1004	EST02018	1860	EST00983
98	EST00260	1007	EST02021	1866	EST00989
106	EST00092	1018	EST02032	1871	EST00994
108	EST00094	1021	EST02035	1888	EST01005
114	EST00098	1034	EST02050	1890	EST01007
115	EST00099	1047	EST02063	1892	EST01009
124	EST00107	1090	EST02109	1903	EST01018
128	EST00252	1096	EST02115	1904	EST01019
156	EST00130	1115	EST02135	1914	EST01026
164	EST00135	1118	EST02138	1930	EST01040
166	EST00137	1129	EST02149	1944	EST01050
174	EST00296	1133	EST02153	1949	EST01054
179	EST00145	1141	EST02163	1962	EST01062
183	EST00148	1163	EST02187	1973	EST01071
201	EST00163	1183	EST02208	1977	EST01075
205	EST00165	1243	EST02272	1982	EST01080
215	EST00172	1264	EST02293	1991	EST01088
230	EST00181	1265	EST02294	1993	EST01090
253	EST00199	1266	EST02295	2000	EST01097
263	EST00203	1287	EST02317	2001	EST01098
268	EST00369	1308	EST02338	2012	EST01106
270	EST00207	1324	EST02354	2013	EST01107
271	EST00283	1344	EST02374	2024	EST01117
273	EST00208	1356	EST02386	2043	EST01131
276	EST00211	1365	EST02396	2051	EST01138
281	EST00214	1383	EST02415	2056	EST01142
285	EST00286	1399	EST02433	2058	EST01144
333	EST00394	1401	EST02435	2059	EST01145
336	EST00397	1405	EST02439	2064	EST01149
339	EST00400	1417	EST02452	2090	EST01167
362	EST00418	1451	EST02487	2094	EST01171
389	EST00440	1457	EST02493	2116	EST01192
441	EST00481	1463	EST02500	2117	EST01193
454	EST00493	1473	EST02510	2128	EST01202
476	EST00509	1479	EST02516	2131	EST01205
493	EST00522	1516	EST02555	2134	EST01208
504	EST00529	1528	EST02569	2144	EST01216
516	EST00538	1531	EST02572	2145	EST01217
518	EST00540	1544	EST02586	2150	EST01222
551	EST01482	1551	EST02593	2155	EST01227
552	EST00565	1558	EST02601	2161	EST01231
559	EST00570	1561	EST02604	2163	EST01238
582	EST00592	1581	EST02625	2174	EST01242
602	EST00606	1586	EST02631	2176	EST01244
606	EST00609	1591	EST02636	2189	EST01255
608	EST00611	1616	EST02661	2214	EST01272
621	EST00620	1624	EST02670	2225	EST01278
635	EST00629	1630	EST02676	2227	EST01279
642	EST00634	1637	EST00796	2233	EST01284
644	EST00636	1639	EST00799	2235	EST01286
687	EST00671	1649	EST00808	2236	EST01287
700	EST00683	1651	EST00810	2255	EST01302
743	EST00714	1677	EST00835	2259	EST01304
753	EST00721	1682	EST00839	2263	EST01307
760	EST00726	1694	EST00849		
764	EST00729	1706	EST00857	SEQ ID#	EST#
808	EST00761	1708	EST00858	2267	EST01756
823	EST01864	1710	EST00860	2281	EST01321
834	EST00771	1716	EST00865	2283	EST01322
886	EST01886			2300	EST01333
919	EST01921	1718	EST00867	2303	EST01335
930	EST01933	1731	EST00879	2303	EST01335
936	EST01939	1742	EST00887	2314	EST01345
948	EST01957	1746	EST00891	2334	EST01358
965	EST01978	1760	EST00903	2339	EST01362
		1767	EST00907	2342	EST01365
		1769	EST00909	2348	EST01371
		1777	EST00913	2358	EST01379
				2367	EST01388

- 59 -

Table 7: ESTs with Good Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>				
		1041	EST02057	2362	EST01383
20	EST00024	1083	EST02102	2378	EST01397
72	EST00071	1099	EST02118	2399	EST01423
82	EST00078	1105	EST02124	2407	EST02714
88	EST00084	1113	EST02133		
137	EST00272	1139	EST02161		
177	EST00328	1146	EST02168		
193	EST00156	1196	EST02221		
200	EST00162	1210	EST02238		
218	EST00175	1233	EST02262		
228	EST00179	1285	EST02314		
247	EST00279	1331	EST02361		
264	EST00204	1388	EST02421		
267	EST00297	1418	EST02453		
296	EST00228	1439	EST02475		
371	EST00426	1502	EST02540		
385	EST00436	1537	EST02578		
392	EST00442	1563	EST02606		
414	EST00460	1599	EST02644		
433	EST00474	1602	EST02647		
453	EST00492	1693	EST00848		
471	EST00505	1695	EST00850		
496	EST00525	1729	EST00877		
524	EST00544	1730	EST00878		
526	EST00546	1738	EST00883		
529	EST00549	1739	EST00885		
549	EST00563	1743	EST00888		
557	EST00569	1768	EST00908		
578	EST00588	1780	EST00916		
596	EST00602	1804	EST00938		
607	EST00610	1805	EST00939		
619	EST00619	1811	EST00945		
657	EST00646	1819	EST00950		
660	EST00649	1826	EST00956		
689	EST00673	1830	EST00959		
695	EST00679	1845	EST00971		
699	EST00682	1848	EST00974		
729	EST00703	1853	EST00977		
742	EST00713	1967	EST01066		
747	EST00717	1992	EST01089		
755	EST00723	1994	EST01091		
759	EST00725	<u>SEQ ID#</u>	<u>EST#</u>		
776	EST00738	1997	EST01094		
778	EST00740	2046	EST01134		
782	EST01551	2101	EST01177		
829	EST00768	2102	EST01178		
835	EST00772	2105	EST01181		
836	EST00773	2106	EST01182		
862	EST01872	2141	EST01213		
881	EST01881	2184	EST01251		
<u>SEQ ID#</u>	<u>EST#</u>	2196	EST01260		
884	EST01884	2203	EST01264		
924	EST01926	2232	EST01283		
929	EST01932	2308	EST01339		
938	EST01941	2345	EST01368		
971	EST01985	2346	EST01369		
995	EST02009	2351	EST01373		
996	EST02010	2354	EST01375		
1031	EST02046	2355	EST01376		
		2359	EST01380		

-50-

Table 8: ESTs with Marginal Probability of Containing Coding Sequence

<u>SEQ ID#</u>	<u>EST#</u>		
11	EST00018	1222	EST02251
12	EST00274	1224	EST02253
24	EST00027	1226	EST02257
45	EST00364	1267	EST02296
79	EST00076	1301	EST02331
90	EST00302	1397	EST02431
110	EST00096	1448	EST02484
144	EST00120	1480	EST02517
145	EST00121	1493	EST02531
192	EST00155	1499	EST02537
222	EST00177	1503	EST02541
234	EST00184	1527	EST02568
277	EST00212	1536	EST02577
319	EST00381	1548	EST02590
368	EST00423	1562	EST02605
370	EST00425	1572	EST02615
387	EST00438	1575	EST02618
402	EST00451	1595	EST02640
415	EST00461	1608	EST02653
418	EST00464	1610	EST02655
426	EST00470	1621	EST02667
503	EST00528	1627	EST02674
517	EST00539	1629	EST02677
522	EST00543	1631	EST02678
532	EST00551	1683	EST00840
540	EST00557	1692	EST00847
570	EST00580	1751	EST00895
573	EST00583	1756	EST00900
576	EST00586	1764	EST02690
613	EST00615	1770	EST00910
617	EST00617	1793	EST00929
626	EST00622	1847	EST00973
681	EST00665	1877	EST00998
726	EST00700	1897	EST01012
727	EST00701	1900	EST01015
738	EST00711	1939	EST01655
745	EST00715	1940	EST01046
752	EST00720	1954	EST01058
791	EST00746	<u>SEQ ID#</u>	<u>EST#</u>
795	EST00749	1990	EST01087
803	EST00756	2008	EST01103
845	EST00777	2031	EST01123
852	EST00782	2041	EST01130
854	EST00784	2044	EST01132
907	EST01907	2060	EST01146
912	EST01912	2100	EST01176
935	EST01938	2136	EST01210
<u>SEQ ID#</u>	<u>EST#</u>	2153	EST01225
968	EST01981	2204	EST01265
985	EST01999	2212	EST01270
988	EST02002	2248	EST01297
1043	EST02059	2250	EST01299
1081	EST02100	2266	EST01310
1089	EST02108	2309	EST01340
1116	EST02136	2347	EST01370
1134	EST02154	2388	EST01406
1205	EST02233	2398	EST01422
		2405	EST01427

Table 9: ESTs with Poor Coding Probability

SEQ ID#	EST#	103	EST00317	204	EST00235	309	EST00174	404	EST00453
1	EST00007	104	EST00354	206	EST00166	315	EST00008	405	EST00454
2	EST00009	105	EST00365	207	EST00167	316	EST00378	406	EST00455
3	EST00010	107	EST00093	209	EST00331	317	EST00379	407	EST00456
4	EST00011	109	EST00095	210	EST00168	318	EST00380	408	EST00457
5	EST00012	111	EST00281	211	EST00332	320	EST00382	409	EST01444
6	EST00013	112	EST00318	212	EST00169	321	EST00383	410	EST00458
8	EST00234	113	EST00097	213	EST00170	322	EST00384	411	EST00459
10	EST00016	116	EST00100	214	EST00171	323	EST00385	412	EST01445
14	EST00019	117	EST00319	216	EST00173	325	EST00386	416	EST00462
16	EST00021	118	EST00101	219	EST00176	326	EST00387	417	EST00463
17	EST00022	119	EST00102	220	EST00372	327	EST00388	419	EST00465
18	EST00373	120	EST00103	221	EST00359	328	EST00389	420	EST00466
19	EST00023	121	EST00104	224	EST00356	329	EST00390	421	EST00467
21	EST00025	122	EST00105	225	EST00178	330	EST00391	422	EST01447
23	EST00026	123	EST00106	226	EST00333	331	EST00392	423	EST00468
25	EST00028	125	EST00108	229	EST00180	332	EST00393	424	EST01448
27	EST00029	126	EST00109	231	EST00334	334	EST00395	425	EST00469
28	EST00030	127	EST00320	232	EST00182	335	EST00396	427	EST01449
29	EST00031	129	EST00321	233	EST00183	337	EST00398	428	EST01451
30	EST00032	130	EST00355	235	EST00185	340	EST00402	429	EST00471
31	EST00033	131	EST00322	236	EST00186	341	EST00403	431	EST00473
32	EST00233	133	EST00111	237	EST00187	342	EST00404	432	EST01452
33	EST00034	134	EST00375	238	EST00188	344	EST00405	434	EST00475
34	EST00035	135	EST00112	239	EST00189	345	EST00406	435	EST00476
35	EST00036	136	EST00113	240	EST00335	347	EST01829	436	EST00477
36	EST00037	138	EST00114	241	EST00191	348	EST01830	437	EST00478
39	EST00039	139	EST00116	242	EST00192	349	EST01831	438	EST00479
40	EST00040	140	EST00117	243	EST00193	350	EST00407	439	EST00480
41	EST00041	141	EST00118	244	EST00194	351	EST00408	440	EST01454
42	EST00042	142	EST00323	245	EST00347	352	EST00409	442	EST01456
46	EST00044	143	EST00119	246	EST00196	353	EST00410	443	EST00482
47	EST00046	146	EST00122	250	EST00197	354	EST01433	444	EST00483
49	EST00047	147	EST00292	252	EST00198	355	EST00411	446	EST00485
50	EST00048	148	EST00236	254	EST00200	356	EST00412	447	EST00486
51	EST00049	149	EST00123	255	EST00201	357	EST00413	448	EST00487
52	EST00052	150	EST00124	256	EST00345	358	EST00414	449	EST00488
53	EST00054	151	EST00125	257	EST00337	359	EST00415	450	EST00489
54	EST00055	152	EST00126	259	EST00202	360	EST00416	451	EST00490
55	EST00056	153	EST00127	260	EST00357	361	EST00417	452	EST00491
56	EST00057	154	EST00128	261	EST00338	363	EST00419	455	EST00494
57	EST00058	155	EST00129	262	EST00339	364	EST00420	457	EST00495
58	EST00059	157	EST00131	265	EST00205	365	EST01434	458	EST00496
59	EST00061	158	EST00132	266	EST00206	366	EST00421	459	EST00497
60	EST00062	159	EST00325	272	EST00340	367	EST00422	460	EST01457
63	EST00065	160	EST00326	274	EST00268	369	EST00424	461	EST01836
64	EST00066	162	EST00133	275	EST00209	372	EST00427	462	EST00498
67	EST00351	163	EST00134	278	EST00342	373	EST01832	464	EST00499
68	EST00068	165	EST00136	279	EST00213	374	EST00428	465	EST00500
69	EST00360	167	EST00138	280	EST00343	375	EST00429	466	EST00501
71	EST00070	168	EST00140	283	EST00215	376	EST01436	467	EST00502
73	EST00072	169	EST00141	284	EST00216	377	EST00430	468	EST00503
74	EST00073	170	EST00295	286	EST00217	378	EST00431	470	EST00504
76	EST00075	171	EST00327	287	EST00218	379	EST00432	SEQ ID#	EST#
80	EST00077	172	EST00142	288	EST00219	380	EST01439	473	EST00506
81	EST00315	173	EST00143	289	EST00220	381	EST00433	474	EST00507
83	EST00079	175	EST00144	290	EST00221	382	EST00434	477	EST01463
84	EST00080	178	EST00294	291	EST00222	SEQ ID#	EST#	478	EST00510
85	EST00081	182	EST00329	292	EST00223	383	EST00435	479	EST00511
86	EST00082	184	EST00149	293	EST00224	384	EST01440	480	EST01464
87	EST00083	185	EST00150	294	EST00225	386	EST00437	481	EST00512
89	EST00085	186	EST00151	SEQ ID#	EST#	388	EST00439	482	EST01465
91	EST00086	190	EST00153	295	EST00226	390	EST01442	483	EST00513
92	EST00087	191	EST00154	297	EST00230	391	EST00441	484	EST00514
94	EST00353	194	EST00157	298	EST00231	393	EST00443	487	EST00516
95	EST00088	SEQ ID#	EST#	302	EST00303	395	EST00445	488	EST00517
96	EST00089	195	EST00158	303	EST00348	397	EST00446	489	EST00518
99	EST00316	196	EST00159	304	EST00307	398	EST00447	490	EST00519
SEQ ID#	EST#	197	EST00160	305	EST00308	399	EST00448	491	EST00520
100	EST00090	198	EST00161	306	EST00309	400	EST00449	492	EST00521
101	EST00091	199	EST00277	307	EST00312	401	EST00450	495	EST00524
		203	EST00164	308	EST00314	403	EST00452	497	EST00526

- 62 -

498	EST01467	600	EST01492	697	EST00680	799	EST00752	894	EST01894
499	EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	EST01897
502	EST01469	605	EST00608	703	EST00685	805	EST00758	898	EST01898
507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
509	EST01472	611	EST00613	706	EST00688	809	EST00762	901	EST01901
510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
511	EST00533	615	EST00616	709	EST00690	811	EST00764	903	EST01903
512	EST00534	616	EST01497	710	EST00691	813	EST00765	904	EST01904
513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
515	EST00537	622	EST01843	713	EST00694	816	EST01856	908	EST01908
519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
520	EST00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
523	EST01838	627	EST00623	717	EST01525	820	EST01860	914	EST01914
525	EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
528	EST00548	630	EST01505	720	EST00697	826	EST01867	917	EST01919
530	EST01477	631	EST00625	721	EST01527	827	EST01558	918	EST01920
531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
533	EST00552	633	EST00627	723	EST00698	830	EST01559	921	EST01923
534	EST01478	634	EST00628	725	EST00699	831	EST00769	922	EST01924
535	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
536	EST01479	637	EST00630	730	EST00704	837	EST01561	925	EST01927
537	EST00554	638	EST00631	731	EST00705	838	EST00774	926	EST01929
538	EST00555	640	EST01509	732	EST00706	839	EST01562	927	EST01930
539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
541	EST00558	643	EST00635	734	EST00708	841	EST00776	931	EST01934
542	EST01480	645	EST00637	735	EST00709	842	EST01563	932	EST01935
543	EST00559	646	EST00638	736	EST01532	843	EST01564	933	EST01936
544	EST00560	647	EST00639	737	EST00710	844	EST01565	934	EST01937
545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
547	EST00561	649	EST00641	740	EST01535	847	EST00779	939	EST01943
548	EST00562	651	EST00643	741	EST00712	848	EST01566	SEQ ID#	EST#
550	EST00564	652	EST01510	744	EST01537	849	EST01567	940	EST01944
553	EST00566	654	EST00644	746	EST00716	850	EST00780	941	EST01945
555	EST01483	655	EST00645	748	EST01850	851	EST00781	942	EST01947
556	EST00568	656	EST01513	749	EST00719	SEQ ID#	EST#	943	EST01948
558	EST01484	658	EST00647	750	EST01539	853	EST00783	944	EST01949
560	EST01485	659	EST00648	751	EST01540	855	EST00785	945	EST01950
561	EST00571	661	EST00650	754	EST00722	856	EST01568	946	EST01953
562	EST00572	662	EST00651	SEQ ID#	EST#	857	EST01868	947	EST01954
563	EST00573	663	EST00652	756	EST01541	858	EST01869	949	EST01958
564	EST00574	664	EST00653	758	EST00724	859	EST01870	950	EST01959
565	EST00575	665	EST00654	761	EST01544	860	EST00786	953	EST01962
566	EST00576	SEQ ID#	EST#	762	EST00727	861	EST01871	954	EST01963
567	EST00577	666	EST01514	763	EST00728	863	EST01873	956	EST01968
568	EST00578	667	EST00655	765	EST00730	864	EST00787	957	EST01969
569	EST00579	668	EST00656	766	EST00731	865	EST01569	958	EST01970
SEQ ID#	EST#	669	EST00657	767	EST00732	866	EST01874	959	EST01972
571	EST00581	670	EST00658	768	EST00733	867	EST01875	960	EST01973
572	EST00582	671	EST00659	770	EST00735	868	EST01876	961	EST01974
574	EST00584	672	EST00660	771	EST01546	869	EST00788	962	EST01975
575	EST00585	673	EST01515	772	EST00736	870	EST00789	963	EST01976
577	EST00587	674	EST01516	774	EST01548	871	EST00790	964	EST01977
580	EST00590	675	EST00661	775	EST00737	872	EST00791	966	EST01979
581	EST00591	676	EST00662	777	EST00739	873	EST00792	967	EST01980
583	EST00593	677	EST00663	779	EST00741	874	EST00793	970	EST01983
584	EST00594	678	EST01517	780	EST01549	875	EST00794	972	EST01986
585	EST00595	679	EST01518	781	EST01550	876	EST00795	974	EST01988
586	EST00596	680	EST00664	783	EST01552	877	EST01877	975	EST01989
587	EST01488	682	EST00666	785	EST01553	878	EST01878	976	EST01990
588	EST00597	683	EST00667	786	EST00742	879	EST01879	977	EST01991
589	EST00598	684	EST00668	787	EST00743	880	EST01880	978	EST01992
590	EST00599	685	EST00669	788	EST00744	882	EST01882	981	EST01995
591	EST01489	686	EST00670	789	EST00745	883	EST01883	982	EST01996
592	EST00600	688	EST00672	790	EST01554	885	EST01885	983	EST01997
593	EST00601	690	EST00674	792	EST00747	887	EST01887	984	EST01998
595	EST01840	692	EST00676	793	EST00748	889	EST01889	987	EST02001
597	EST00603	693	EST00677	794	EST01555	890	EST01890	989	EST02003
598	EST00604	694	EST00678	796	EST00750	892	EST01892	990	EST02004
599	EST00605	696	EST01521	797	EST00751	893	EST01893	991	EST02005

- 63 -

992	EST02006	1086	EST02105	1184	EST02209	1274	EST02303	1363	EST02394
994	EST02008	1087	EST02106	1185	EST02210	1275	EST02304	1364	EST02395
997	EST02011	1088	EST02107	1186	EST02211	1276	EST02305	1366	EST02397
999	EST02013	1091	EST02110	1187	EST02212	1278	EST02307	1367	EST02398
1001	EST02015	1093	EST02112	1188	EST02213	1279	EST02308	1368	EST02399
1002	EST02016	1095	EST02114	1189	EST02214	1280	EST02309	1370	EST02401
1003	EST02017	1097	EST02116	1190	EST02215	1281	EST02310	1372	EST02403
1005	EST02019	1098	EST02117	1191	EST02216	1282	EST02311	1373	EST02404
1006	EST02020	1100	EST02119	1192	EST02217	1283	EST02312	1375	EST02406
1008	EST02022	1101	EST02120	1193	EST02218	1284	EST02313	1376	EST02407
1009	EST02023	1102	EST02121	1194	EST02219	1286	EST02316	1377	EST02408
1010	EST02024	1104	EST02123	1195	EST02220	1288	EST02318	1378	EST02409
1011	EST02025	1106	EST02125	1197	EST02222	1289	EST02319	1379	EST02410
1012	EST02026	1107	EST02126	1198	EST02223	1290	EST02320	1380	EST02411
1013	EST02027	1108	EST02127	1199	EST02224	1291	EST02321	1381	EST02413
1014	EST02028	1109	EST02128	1200	EST02226	1292	EST02322	1382	EST02414
1015	EST02029	1110	EST02129	1201	EST02228	1293	EST02323		
1016	EST02030	1111	EST02131	1202	EST02229	1294	EST02324		
1017	EST02031	1112	EST02132	1203	EST02230	1295	EST02325		
1019	EST02033	1114	EST02134	1204	EST02232	1296	EST02326		
1022	EST02036	1117	EST02137	1206	EST02234	SEQ ID#	EST#		
1023	EST02037	1119	EST02139	1207	EST02235				
1024	EST02038	1120	EST02140	1208	EST02236	1298	EST02328		
1025	EST02040	1121	EST02141	1209	EST02237	1299	EST02329		
1026	EST02041	1122	EST02142	SEQ ID#	EST#	1300	EST02330		
1027	EST02042	1123	EST02143			1302	EST02332		
1028	EST02043	1124	EST02144	1211	EST02239	1303	EST02333		
1029	EST02044	1125	EST02145	1212	EST02240	1304	EST02334		
1030	EST02045	SEQ ID#	EST#	1213	EST02241	1305	EST02335		
1032	EST02048			1214	EST02242	1306	EST02336		
1033	EST02049	1127	EST02147	1215	EST02244	1307	EST02337		
1036	EST02052	1128	EST02148	1216	EST02245	1309	EST02339		
SEQ ID#	EST#	1130	EST02150	1217	EST02246	1310	EST02340		
1037	EST02053	1131	EST02151	1218	EST02247	1311	EST02341		
1038	EST02054	1132	EST02152	1219	EST02248	1313	EST02343		
1040	EST02056	1135	EST02155	1220	EST02249	1314	EST02344		
1042	EST02058	1136	EST02156	1221	EST02250	1315	EST02345		
1044	EST02060	1137	EST02157	1223	EST02252	1316	EST02346		
1045	EST02061	1138	EST02159	1225	EST02254	1317	EST02347		
1046	EST02062	1140	EST02162	1226	EST02255	1318	EST02348		
1048	EST02064	1142	EST02164	1227	EST02256	1319	EST02349		
1049	EST02065	1143	EST02165	1232	EST02261	1320	EST02350		
1050	EST02066	1144	EST02166	1234	EST02263	1321	EST02351		
1051	EST02067	1145	EST02167	1235	EST02264	1322	EST02352		
1052	EST02068	1148	EST02170	1236	EST02265	1323	EST02353		
1053	EST02069	1149	EST02171	1237	EST02266	1325	EST02355		
1054	EST02070	1150	EST02172	1238	EST02267	1326	EST02356		
1055	EST02071	1152	EST02174	1239	EST02268	1327	EST02357		
1056	EST02072	1153	EST02175	1240	EST02269	1328	EST02358		
1057	EST02073	1154	EST02176	1241	EST02270	1329	EST02359		
1058	EST02074	1155	EST02177	1242	EST02271	1330	EST02360		
1059	EST02075	1156	EST02178	1244	EST02273	1333	EST02363		
1060	EST02076	1157	EST02180	1246	EST02275	1334	EST02364		
1061	EST02078	1158	EST02181	1247	EST02276	1335	EST02365		
1062	EST02079	1159	EST02182	1248	EST02277	1336	EST02366		
1063	EST02081	1160	EST02183	1249	EST02278	1337	EST02367		
1064	EST02082	1161	EST02184	1250	EST02279	1338	EST02368		
1065	EST02083	1162	EST02185	1251	EST02280	1339	EST02369		
1066	EST02084	1164	EST02188	1252	EST02281	1342	EST02372		
1067	EST02085	1165	EST02189	1253	EST02282	1343	EST02373		
1068	EST02086	1166	EST02190	1254	EST02283	1345	EST02375		
1070	EST02088	1167	EST02191	1255	EST02284	1346	EST02376		
1071	EST02089	1168	EST02193	1256	EST02285	1347	EST02377		
1072	EST02090	1169	EST02194	1257	EST02286	1349	EST02379		
1073	EST02091	1170	EST02195	1258	EST02287	1350	EST02380		
1074	EST02092	1171	EST02196	1259	EST02288	1351	EST02381		
1075	EST02093	1172	EST02197	1260	EST02289	1352	EST02382		
1076	EST02094	1173	EST02198	1261	EST02290	1353	EST02383		
1077	EST02096	1174	EST02199	1262	EST02291	1354	EST02384		
1078	EST02097	1175	EST02200	1263	EST02292	1355	EST02385		
1079	EST02098	1176	EST02201	1268	EST02297	1357	EST02387		
1080	EST02099	1177	EST02202	1269	EST02298	1358	EST02388		
1082	EST02101	1178	EST02203	1270	EST02299	1359	EST02390		
1084	EST02103	1179	EST02204	1271	EST02300	1360	EST02391		
1085	EST02104	1180	EST02205	1272	EST02301	1361	EST02392		
		1182	EST02207	1273	EST02302	1362	EST02393		

-65-

1907	EST01022	2016	EST01110	2118	EST01194	2223	EST01742	2332	EST01794
1908	EST01023	2018	EST01111	2119	EST01195	2224	EST01277	2333	EST01357
1909	EST01024	2019	EST01112	2122	EST01197	2228	EST01280	2335	EST01359
1911	EST02694	2020	EST01113	2123	EST01713	2229	EST01281	2336	EST01360
1912	EST01025	2021	EST01114	2124	EST01198	2231	EST01746	2337	EST01361
1913	EST01646	2022	EST01115	2125	EST01199	2237	EST01288	2340	EST01802
1915	EST01027	2023	EST01116	2126	EST01200	2238	EST01289	2341	EST01364
1916	EST01028	2025	EST01118	2127	EST01201	2239	EST01290	2343	EST01366
1917	EST01029	2026	EST01119	2129	EST01203	2240	EST01291	2344	EST01367
1918	EST02695	2027	EST01120	2130	EST01204	2241	EST01747	2349	EST01372
1919	EST01030	2028	EST01121	2132	EST01206	2242	EST01292	2350	EST02708
1920	EST01031	2029	EST01682	2133	EST01207	2243	EST01293	2352	EST01374
1921	EST01647	2030	EST01122	2135	EST01209	2244	EST01294	2356	EST01377
1922	EST01032	2033	EST01684	2137	EST01211	2246	EST01295	2357	EST01378
1923	EST01033	2034	EST01124	2139	EST01716	2247	EST01296	2360	EST01381
1924	EST01034	2035	EST01125	2140	EST01212	2249	EST01298	2361	EST01382
1925	EST01035	2036	EST01126	2142	EST01214	2251	EST01300	2363	EST01384
1926	EST01036	2037	EST01686	2143	EST01215	2252	EST01750	2364	EST01385
1927	EST01037	2038	EST01127	2147	EST01219	2253	EST01301	2365	EST01386
1929	EST01039	2039	EST01128	2148	EST01220	2256	EST02718	2366	EST01387
1932	EST01042	2040	EST01129	2151	EST01223	2257	EST01303	2369	EST01811
1934	EST01043	2042	EST01688	2152	EST01224	2258	EST01754	2370	EST01390
1935	EST01044	2045	EST01133	2154	EST01226	2260	EST01305	2371	EST01391
1936	EST01045	2047	EST01135	2156	EST01718	2261	EST01755	2372	EST01392
1937	EST01652	2048	EST01136	2157	EST01719	2262	EST01306	2375	EST01815
1938	EST01654	2049	EST01689	2158	EST01228	2264	EST01308	2376	EST01395
1941	EST01047	2050	EST01137	2159	EST01229	2265	EST01309	2377	EST01396
1942	EST01048	2052	EST01139	2160	EST01230	2268	EST01311	2379	EST01398
1943	EST01049	2053	EST01140	2162	EST01232	2269	EST01312	2380	EST01399
1945	EST01051	2054	EST01141	2163	EST01233	2270	EST01313	2381	EST01400
1946	EST02696	2055	EST01690	2164	EST01234	2271	EST01314	2382	EST01401
1947	EST01052	2057	EST01143	2165	EST01720	2272	EST01762	2383	EST01402
1948	EST01053	2061	EST01147	2166	EST01236	2273	EST01315	2384	EST01403
1950	EST01055	2062	EST02701	2167	EST01237	2275	EST01316	2385	EST01816
1951	EST01056	2063	EST01148	2169	EST01222	2276	EST01317	2386	EST01404
1952	EST01057	2065	EST01691	2170	EST01239	2277	EST01318	2387	EST01405
1955	EST01662	2066	EST01692	2171	EST01240	2278	EST01319		
1957	EST01059	2067	EST01693	2172	EST01241	2279	EST01320		
1958	EST01060	2069	EST01150	2175	EST01243	2280	EST01763		
1959	EST01061	2070	EST01151	2177	EST01245	2284	EST01323		
1963	EST01063	2072	EST01152	2178	EST01726				
1964	EST01064	2074	EST01698	2179	EST01246				
1966	EST01065	2075	EST01153	2180	EST01247	2285	EST01768		
1968	EST01067	2076	EST02702	2181	EST01248	2287	EST01770		
1969	EST01068	2077	EST01154	SEQ ID#	EST#	2288	EST01324		
1970	EST01666	2078	EST01155			2290	EST01772		
1971	EST01069	2079	EST01156	2182	EST01249	2291	EST01773		
1972	EST01070	2080	EST01157	2183	EST01250	2292	EST01326		
1975	EST01073	SEQ ID#	EST#	2185	EST01252	2293	EST01327		
1976	EST01074			2186	EST01253	2294	EST01328		
1978	EST01076	2081	EST01158	2187	EST01727	2295	EST01329		
1979	EST01077	2082	EST01159	2188	EST01254	2296	EST01330		
SEQ ID#	EST#	2083	EST01160	2190	EST01728	2298	EST01331		
		2084	EST01161	2191	EST01256	2299	EST01332		
1980	EST01078	2085	EST01162	2193	EST01258	2301	EST01334		
1981	EST01079	2086	EST01163	2194	EST01729	2304	EST01780		
1983	EST01081	2087	EST01164	2195	EST01259	2305	EST01336		
1984	EST01082	2088	EST01166	2197	EST01261	2306	EST01337		
1985	EST01083	2091	EST01168	2198	EST01730	2310	EST01341		
1986	EST01084	2093	EST01170	2199	EST01262	2311	EST01342		
1988	EST01085	2095	EST01701	2200	EST01731	2312	EST01343		
1989	EST01086	2096	EST01172	2201	EST01263	2313	EST01344		
1995	EST01092	2097	EST01173	2202	EST01732	2315	EST01346		
1996	EST01093	2098	EST01174	2205	EST01735	2316	EST01782		
1998	EST01095	2099	EST01175	2206	EST01736	2317	EST01347		
1999	EST01096	2103	EST01179	2208	EST01267	2318	EST01348		
2002	EST01099	2104	EST01180	2209	EST02717	2319	EST01349		
2003	EST01675	2107	EST01183	2210	EST01268	2321	EST01350		
2005	EST01100	2108	EST01184	2211	EST01269	2322	EST01351		
2006	EST01101	2109	EST01185	2213	EST01271	2323	EST01789		
2007	EST01102	2110	EST01186	2215	EST01273	2325	EST01353		
2009	EST01677	2111	EST01187	2218	EST01274	2327	EST01354		
2010	EST01104	2112	EST01188	2219	EST01275	2328	EST01355		
2011	EST01105	2113	EST01189	2220	EST01740	2329	EST01792		
2014	EST01108	2114	EST01190	2221	EST01741	2330	EST01793		
2015	EST01109	2115	EST01191	2222	EST01276	2331	EST01356		

-66-

<u>SEQ</u>	<u>ID#</u>	<u>EST#</u>
2389		EST01407
2391		EST01415
2392		EST01416
2395		EST01419
2397		EST01421
2401		EST01424
2403		EST01425
2404		EST01426
2406		EST02713
2409		EST00273

SUBSTITUTE SHEET

EXAMPLE 10

Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

Table 10: Three-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification

1834	EST01620	M	AMP deaminase, brain
97	EST00289	M	Aconitase
691	EST00575	M	Alcohol dehydrogenase
2092	EST01700	M	Anion exchanger homolog AE3
396	EST01443	M	CDPdiacylglycerol-serine O-phosphatidyltransferase
1956	EST01663	M	Ca2+-transporting ATPase 2
1039	EST02055	M	Calcium channel
2192	EST01257	M	Diacylglycerol kinase, lymphocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	M	Fo ATPase beta subunit, mitochondrial
1667	EST00825	M	Gamma-aminobutyric acid transporter
1412	EST02445	M	Glutamate-aspartate carrier protein
1020	EST02034	M	Glutaminase
2326	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
2173	EST01724	M	Lon protease
1427	EST02463	M	Long-chain-fatty-acid-CoA ligase
2226	EST01744	M	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	M	Neutrophil oxidase factor
1681	EST01573	M	Nucleoside diphosphate kinase
2254	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
93	EST00287	M	Processing enhancing protein
2297	EST01775	M	Prohormone cleavage enzyme
9	EST00376	M	Prolyl endopeptidase
1654	EST01572	M	Protochlorophyllide reductase
38	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
1856	EST01627	M	Ribosomal protein L1a
1974	EST01667	M	Ribosomal protein L3
301	EST00300	M	Ribosomal protein L30
22	EST00301	M	Ribosomal protein S10
2402	EST01826	M	Ribosomal protein S10
463	EST01459	M	Ribosomal protein YL10
2073	EST01697	M	Succinate dehydrogenase flavoprotein
2138	EST01715	M	Succinate dehydrogenase flavoprotein
1771	EST01601	M	Thiosulfate sulfurtransferase (rhodanese)
2121	EST01711	M	Valine-tRNA ligase
1726	EST01588	M	XPR2 alkaline extracellular protease
913	EST01913	M	Clathrin coat assembly protein AP50 homolog
1035	EST02051	M	J1 protein
969	EST01982	R	ADP-ribosylation factor 1
1126	EST02146	R	Calbindin D28
1910	EST01645	R	Calmodulin
485	EST01466	R	Calmodulin-dependent protein kinase, type II, beta
2302	EST01779	R	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R	Kinase 5 protein
2282	EST01764	R	Lamin B receptor
SEQ ID	EST#	Group	Putative Identification

161	EST00247	R	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	R	MARCKS homolog
1386	EST02418	R	MARCKS homolog
227	EST00259	R	Notch/Xotch
952	EST01961	R	Notch/Xotch
1395	EST02429	R	Nuclear factor 1-like protein (NF1)
2353	EST01806	R	Prohibitin
1069	EST02087	R	Protein kinase C, zeta
1933	EST01650	R	Protein phosphatase 2A beta subunit

-69-

202	EST00298	R	Protein-tyrosine phosphatase LRP
1478	EST02515	R	Rab5
1408	EST02442	R	Seven in absentia
300	EST00232	R	Transforming protein (dbl)
1147	EST02169	R	Tyrosine kinase
1348	EST02378	R	cAMP-dependent protein kinase inhibitor
1931	EST01041	R	cAMP-regulated phosphoprotein
1413	EST02447	R	cAMP-specific phosphodiesterase
37	EST00038	R	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	R	rho H12/ ARH12
299	EST00249	R	smg p25A GDP dissociation inhibitor
189	EST00282	R	trkB
1332	EST02362	R	GA binding protein, beta subunit
1277	EST02306	R	Bib protein
43	EST00371	R	Maternal G10 protein
1704	EST01580	R	Myeloid differentiation primary response gene My
346	EST01828	R	Otd homeotic protein
187	EST00152	R	Wilm's tumor-related protein
249	EST00275	R	Zinc Finger Proteins
413	EST01446	R	Zinc Finger Proteins
469	EST01460	R	Zinc Finger Proteins
833	EST01560	R	Zinc Finger Proteins
1230	EST02259	R	Zinc finger proteins
1496	EST02534	R	Zinc finger proteins
2324	EST01352	R	Zinc Finger Proteins
208	EST00250	S	60K filarial antigen
2320	EST01784	S	60K filarial antigen
251	EST00370	S	Actin, other
2146	EST01218	S	Actin, other
248	EST00271	S	Actinin, alpha
891	EST01891	S	Actinin, alpha
1500	EST02538	S	Actinin, alpha
132	EST00110	S	Agrin
1852	EST01625	S	Agrin
1965	EST01664	S	Amyloid A4
2068	EST01694	S	Amyloid A4
2408	EST00244	S	Amyloid A4
1880	EST01634	S	Axonal glycoprotein TAG-1
2004	EST01676	S	Cofilin
650	EST00642	S	Dilute (myosin heavy chain)
2217	EST01738	S	Gelation factor ABP-280
1885	EST01639	S	Histocompatibility antigen modifier 1
77	EST00257	S	Kinesin
SEQ ID	EST#	Group	Putative Identification
78	EST00258	S	Kinesin
2245	EST01748	S	Kinesin
313	EST00276	S	Lysosomal membrane glycoprotein 1 (LAMP-1)
223	EST00368	S	Microtubule-associated protein 1B
824	EST01865	S	Microtubule-associated protein 1B
2032	EST01683	S	Microtubule-associated protein 1B
2017	EST01678	S	Milk fat globule membrane protein
1567	EST02610	S	Neural cell adhesion molecule L1
506	EST01471	S	Neuraxin
2368	EST01389	S	Radial spoke protein 3
951	EST01960	S	Spectrin, beta
2089	EST01699	S	Sperm membrane protein
653	EST01512	S	Tubulin, alpha
311	EST00270	S	Tubulin, beta
594	EST01490	S	Tubulin, beta
757	EST01542	S	Tubulin, beta
1245	EST02274	S	Tubulin, beta
1589	EST02634	S	Tubulin, beta
1468	EST02505	S	Matrin 3

-70-

1371	EST02402	S	Talin
1701	EST00853	S	Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

Table 11: Thirteen-Class Functional Groupings of ESTs

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
300	EST00232	OG	Transforming protein (db1)
37	EST00038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	OM	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphocyte
1441	EST02477	OM	Diamine acetyltransferase
2289	EST01325	OM	Fatty acid synthase
1020	EST02034	OM	Glutaminase
2326	EST01791	OM	Inositol-1,4,5-trisphosphate 3-kinase
1427	EST02463	OM	Long-chain-fatty-acid-CoA ligase
2226	EST01744	OM	NAD(P)+ transhydrogenase (B-specific)
1566	EST02609	OM	Neutrophil oxidase factor
1681	EST01573	OM	Nucleoside diphosphate kinase

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2254	EST01751	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiesterase
1654	EST01572	OM	Protochlorophyllide reductase
2073	EST01697	OM	Succinate dehydrogenase flavoprotein
2138	EST01715	OM	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Thiosulfate sulfurtransferase (rhodanese)
2173	EST01724	PI	Lon protease
2297	EST01775	PI	Prohormone cleavage enzyme
9	EST00376	PI	Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
132	EST00110	SC	Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00258	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST00368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC	Tubulin, beta
594	EST01490	SC	Tubulin, beta
757	EST01542	SC	Tubulin, beta
1245	EST02274	SC	Tubulin, beta
1589	EST02634	SC	Tubulin, beta
1701	EST00853	SC	Unc-104
969	EST01982	ST	ADP-ribosylation factor 1
1126	EST02146	ST	Calbindin D28
1910	EST01645	ST	Calmodulin
161	EST00247	ST	MARCKS (myristoylated alanine-rich protein kinase)
769	EST00734	ST	MARCKS homolog
1386	EST02418	ST	MARCKS homolog
1931	EST01041	ST	cAMP-regulated phosphoprotein
1413	EST02447	ST	cAMP-specific phosphodiesterase
299	EST00249	ST	smg p25A GDP dissociation inhibitor

<u>SEQ ID</u>	<u>EST#</u>	<u>Group</u>	<u>Putative Identification</u>
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca ²⁺ -transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	EST00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

EXAMPLE 11

CDNA Libraries Generated From Specific Genomic DNA
by Exon Expression & Amplification

5

Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/BglII restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection by electroporation of these constructs into COS cells, RNA transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A)+ cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were end-repaired with T4 DNA polymerase, digested with the appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/X-gal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.

35

- 75 -

When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

EXAMPLE 12

PCR Amplification from Predicted Exons

Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. The coding region prediction program CRM (E. Uberbacher and R. Mural, *Proc. Natl. Acad. Sci. USA* 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, *Comp. Applic. Biosci.* 6: 263, 1990), which predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

-76-

sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

EXAMPLE 13

5 Complete Sequence of EST Clone Inserts

10 There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the EST sequences. Procedures for these methods are provided in Basic Methods in Molecular Biology (David et al. *supra*). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA clone. The complete sequence of the inserts of four EST clones (representing SEQ ID NOs 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). The KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. This results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

20 Samples for each time point was purified by electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

- 77 -

software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

EXAMPLE 14

Determining Reading Frame, Orientation, Coding Regions: ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GRAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

EXAMPLE 15

Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

-78-

present invention, to prepare PCR primers for a variety of applications. The PCR primers are preferably at least 15 bases, and more preferably at least 18 bases in length. The procedure of Example 5 is repeated using the desired EST, or
5 using the corresponding cDNA or genomic DNA sequence from Example 13. It is preferred that the primer pairs have approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening
10 genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

15 EXAMPLE 16

Forensic Matching by DNA Sequencing

20 In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12
25 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect
30 and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. This lack of identity can be proven, for example, with only one sequence. Identity, on the other hand, should be
35 demonstrated with a large number of sequences, all matching. Preferably, a minimum of 50 statistically identical sequences

-79-

of 100 bases in length are used to prove identity between the suspect and the sample.

EXAMPLE 17

Positive Identification by DNA Sequencing

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprint-type identification of any individual. In this technique, primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

EXAMPLE 18

Southern Blot Forensic Identification

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

-80-

blotting see Davis et al. (Basic Methods in Molecular Biology, 1986, Elsevier Press. pp 62-65).

5 A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases, are radioactively or colorimetrically labeled using end-labeled oligonucleotides derived from the ESTs, nick translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., supra). Preferably, at least 10 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every 15 individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide a statistically higher level of confidence in the identification since there will be an increased number of sets of bands used for identification.

20 EXAMPLE 19

Dot Blot Identification Procedure

25 Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

30 Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with p^{32} using polynucleotide kinase (Pharmacia). Dot Blots are created by 35 spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

-81-

5 NOs provided in Table 7 onto nitrocellulose or the like using a vacuum dot blot manifold (BioRad, Richmond California). The nitrocellulose filter containing the EST clone sequences is baked or UV linked to the filter, prehybridized and hybridized with labeled probe using techniques known in the art (Davis et al. supra). The ³²P labeled DNA fragments are sequentially hybridized with successively stringent conditions to detect minimal differences between the 30 bp sequence and the DNA. Tetramethylammonium chloride is useful for identifying clones containing small numbers of nucleotide mismatches (Wood et al., Proc. Natl. Acad. Sci. USA 82(6):1585-1588 (1985) which is hereby incorporated by reference. A unique pattern of dots distinguishes one individual from another individuals.

EXAMPLE 20

Alternative "Fingerprint" Identification Technique

20 EST sequences and the corresponding complete cDNA sequences can be used to create a unique fingerprint for an individual. Thus pools of EST sequences can be used in forensics, paternity suits or the like to differentiate one individual from another.

25 Entire EST sequences can be used; similarly oligonucleotides can be prepared from EST sequences. In this example, 20-mer oligonucleotides are prepared from 200 EST sequences using commercially available oligonucleotide services such as Oligos Etc., Wilsonville, OR. Patient cell samples are processed for DNA using techniques well known to those with skill in the art. The nucleic acid is digested with restriction enzymes EcoRI and XbaI. Following digestion, samples are applied to wells for electrophoresis. The procedure, as known in the art, may be modified to accommodate polyacrylamide electrophoresis, however in this example, samples containing 5 ug of DNA are loaded into wells

-82-

and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with P³². The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

EXAMPLE 21

Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.

-83-

EXAMPLE 22

Identification of a gene associated with
Angelman's disease

5

Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease include developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. (The example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

10

15

20

25

30

35

ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize to chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics for genetic screening. These ESTs are associated with chromosome deletions present in Angelman's disease. Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

- 84 -

from normal patients is essential for providing gene or other therapies for AD patients.

Genetic diseases are not always accompanied by gene deletions. Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABA_A receptor

-85-

protein subunit from patients with Angelman's disease (Am. J. Hum. Genet. 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

5

EXAMPLE 23**Preparation and Use of Antisense Oligonucleotides**

10 Antisense RNA molecules are known to be useful for regulating translation within the cell. Antisense RNA molecules can be produced from EST sequences or from the corresponding gene sequences. These antisense molecules can be used as diagnostic probes to determine whether or not a particular gene is expressed in a cell. Similarly, the
15 antisense molecules can be used as a therapeutic to regulate gene expression once the EST is associated with a particular disease (see Example 22).

The antisense molecules are obtained from a nucleotide sequence by reversing the orientation of the coding region with regard to the promoter. Thus, the antisense RNA is
20 complementary to the corresponding mRNA. For a review of antisense design see Green et al., Ann. Rev. Biochem. 55:569-597 (1986), which is hereby incorporated by reference. The antisense sequences can contain modified sugar phosphate
25 backbones to increase stability and make them less sensitive to RNase activity. Examples of the modifications are described by Rossi et al., Pharmacol. Ther. 50(2):245-254, (1991).

30 Antisense molecules are introduced into cells that express the gene corresponding to the EST of interest in culture. In a preferred application of this invention, the polypeptide encoded by the gene is first identified, so that the effectiveness of antisense inhibition on translation can be monitored using techniques that include but are not
35 limited to antibody-mediated tests such as RIAs and ELISA, functional assays, or radiolabelling. The antisense molecule is introduced into the cells by diffusion or by transfection

-86-

procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between $1 \times 10^{-10} \text{M}$ to $1 \times 10^{-4} \text{M}$. Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of 1×10^{-7} translates into a dose of approximately 0.6 mg/kg bodyweight. Levels of oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of the oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

EXAMPLE 24

Preparation and use of Triple Helix Probes

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

-87-

expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a cell. Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine:homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOs such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. For information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (Science 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides may be prepared on an oligonucleotide synthesizer or they may be purchased commercially from a company specializing in custom oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but are not limited to calcium phosphate precipitation, DEAE-Dextran, electroporation, liposome-mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

-88-

with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

EXAMPLE 25

Gene expression from DNA Sequences Corresponding to ESTs

A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

- 89 -

includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from the bacterial vector using oligonucleotide primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5' primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example, β -globin. Antibody to β -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the β -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating β -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit β -globin. Intron II of the rabbit β -globin gene facilitates splicing of the expressed transcript,

-90-

and the polyadenylation signal incorporated into the construct increases the level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express™ Translation Kit (Stratagene).

Example 26

Production of an Antibody to a Human Protein

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., *Nature* 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a

- 91 -

microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., *Meth. Enzymol.* 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. *Basic Methods in Molecular Biology* Elsevier, New York. Section 21-2.

B. Polyclonal Antibody Production by Immunization

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. *J. Clin. Endocrinol. Metab.* 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: *Handbook of Experimental Immunology* D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12 μ M). Affinity of the antisera for the antigen is

-92-

determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: *Manual of Clinical Immunology*, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a biological sample.

EXAMPLE 27

Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker. Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions, or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by ion-exchange chromatography or by ammonium sulfate fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies are labeled with the marker. Either monoclonal or heterologous antisera is suitable for either procedure.

- 93 -

A. Immunohistochemical Techniques

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: **Basic & Clinical Immunology**, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: **Methods in Immunodiagnosis**, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example ^{125}I , and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4 μm , unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

-94-

Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5 If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for
10 example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that
15 signal using appropriate standards.

B. Identification of Tissue Specific Soluble Proteins

The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection
20 strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to
25 disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and the soluble protein-containing fraction concentrated if
30 necessary and reserved for analysis.

A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by
35 Davis, L. et al., Section 19-2 in: *Basic Methods in Molecular Biology* (P. Leder, ed), Elsevier, New York (1986), using a

-95-

range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50 μ l, and containing from about 1 to 100 μ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis, is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

-96-

differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

5 While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

10

VII. Correlation of EST and Clone Identifiers

15 The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

20

Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

-97-

Table 12. SEQ ID NO Cross References

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
1	EST00007	M61959	HFA01	64	EST00066	M62010	HCC13	128	EST00252	M62191	HCC57	178	EST00141	M62083	HCC105
2	EST00009	M61953	HFA05	65	EST00067	M62011	HCC18	129	EST00322	M62254	HCC60	179	EST00142	M62085	HCC106
3	EST00010	M61961	HFA07	66	EST00068	M62012	HCC21	130	EST00323	M62255	HCC61	180	EST00143	M62086	HCC107
4	EST00011	M61962	HFA08	67	EST00069	M62013	HCC22	131	EST00324	M62256	HCC62	181	EST00144	M62087	HCC108
5	EST00012	M61963	HFA10	68	EST00070	M62014	HCC23	132	EST00325	M62257	HCC63	182	EST00145	M62088	HCC109
6	EST00013	M61964	HFA11	69	EST00071	M62015	HCC24	133	EST00326	M62258	HCC64	183	EST00146	M62089	HCC110
7	EST00014	M61965	HFA12	70	EST00072	M62016	HCC25	134	EST00327	M62259	HCC65	184	EST00147	M62090	HCC111
8	EST00015	M61966	HFA20	71	EST00073	M62017	HCC26	135	EST00328	M62260	HCC66	185	EST00148	M62091	HCC112
9	EST00016	M61967	HFA21	72	EST00074	M62018	HCC27	136	EST00329	M62261	HCC67	186	EST00149	M62092	HCC113
10	EST00017	M61968	HFA22	73	EST00075	M62019	HCC28	137	EST00330	M62262	HCC68	187	EST00150	M62093	HCC114
11	EST00018	M61969	HFA23	74	EST00076	M62020	HCC29	138	EST00331	M62263	HCC69	188	EST00151	M62094	HCC115
12	EST00019	M61970	HFA24	75	EST00077	M62021	HCC30	139	EST00332	M62264	HCC70	189	EST00152	M62095	HCC116
13	EST00020	M61971	HFA25	76	EST00078	M62022	HCC31	140	EST00333	M62265	HCC71	190	EST00153	M62096	HCC117
14	EST00021	M61972	HFA26	77	EST00079	M62023	HCC32	141	EST00334	M62266	HCC72	191	EST00154	M62097	HCC118
15	EST00022	M61973	HFA27	78	EST00080	M62024	HCC33	142	EST00335	M62267	HCC73	192	EST00155	M62098	HCC119
16	EST00023	M61974	HFA28	79	EST00081	M62025	HCC34	143	EST00336	M62268	HCC74	193	EST00156	M62099	HCC120
17	EST00024	M61975	HFA29	80	EST00082	M62026	HCC35	144	EST00337	M62269	HCC75	194	EST00157	M62100	HCC121
18	EST00025	M61976	HFA30	81	EST00083	M62027	HCC36	145	EST00338	M62270	HCC76	195	EST00158	M62101	HCC122
19	EST00026	M61977	HFA31	82	EST00084	M62028	HCC37	146	EST00339	M62271	HCC77	196	EST00159	M62102	HCC123
20	EST00027	M61978	HFA32	83	EST00085	M62029	HCC38	147	EST00340	M62272	HCC78	197	EST00160	M62103	HCC124
21	EST00028	M61979	HFA33	84	EST00086	M62030	HCC39	148	EST00341	M62273	HCC79	198	EST00161	M62104	HCC125
22	EST00029	M61980	HFA34	85	EST00087	M62031	HCC40	149	EST00342	M62274	HCC80	199	EST00162	M62105	HCC126
23	EST00030	M61981	HFA35	86	EST00088	M62032	HCC41	150	EST00343	M62275	HCC81	200	EST00163	M62106	HCC127
24	EST00031	M61982	HFA36	87	EST00089	M62033	HCC42	151	EST00344	M62276	HCC82	201	EST00164	M62107	HCC128
25	EST00032	M61983	HFA37	88	EST00090	M62034	HCC43	152	EST00345	M62277	HCC83	202	EST00165	M62108	HCC129
26	EST00033	M61984	HFA38	89	EST00091	M62035	HCC44	153	EST00346	M62278	HCC84	203	EST00166	M62109	HCC130
27	EST00034	M61985	HFA39	90	EST00092	M62036	HCC45	154	EST00347	M62279	HCC85	204	EST00167	M62110	HCC131
28	EST00035	M61986	HFA40	91	EST00093	M62037	HCC46	155	EST00348	M62280	HCC86	205	EST00168	M62111	HCC132
29	EST00036	M61987	HFA41	92	EST00094	M62038	HCC47	156	EST00349	M62281	HCC87	206	EST00169	M62112	HCC133
30	EST00037	M61988	HFA42	93	EST00095	M62039	HCC48	157	EST00350	M62282	HCC88	207	EST00170	M62113	HCC134
31	EST00038	M61989	HFA43	94	EST00096	M62040	HCC49	158	EST00351	M62283	HCC89	208	EST00171	M62114	HCC135
32	EST00039	M61990	HFA44	95	EST00097	M62041	HCC50	159	EST00352	M62284	HCC90	209	EST00172	M62115	HCC136
33	EST00040	M61991	HFA45	96	EST00098	M62042	HCC51	160	EST00353	M62285	HCC91	210	EST00173	M62116	HCC137
34	EST00041	M61992	HFA46	97	EST00099	M62043	HCC52	161	EST00354	M62286	HCC92	211	EST00174	M62117	HCC138
35	EST00042	M61993	HFA47	98	EST00100	M62044	HCC53	162	EST00355	M62287	HCC93	212	EST00175	M62118	HCC139
36	EST00043	M61994	HFA48	99	EST00101	M62045	HCC54	163	EST00356	M62288	HCC94	213	EST00176	M62119	HCC140
37	EST00044	M61995	HFA49	100	EST00102	M62046	HCC55	164	EST00357	M62289	HCC95	214	EST00177	M62120	HCC141
38	EST00045	M61996	HFA50	101	EST00103	M62047	HCC56	165	EST00358	M62290	HCC96	215	EST00178	M62121	HCC142
39	EST00046	M61997	HFA51	102	EST00104	M62048	HCC57	166	EST00359	M62291	HCC97	216	EST00179	M62122	HCC143
40	EST00047	M61998	HFA52	103	EST00105	M62049	HCC58	167	EST00360	M62292	HCC98	217	EST00180	M62123	HCC144
41	EST00048	M61999	HFA53	104	EST00106	M62050	HCC59	168	EST00361	M62293	HCC99	218	EST00181	M62124	HCC145
42	EST00049	M62000	HFA54	105	EST00107	M62051	HCC60	169	EST00362	M62294	HCC100	219	EST00182	M62125	HCC146
43	EST00050	M62001	HFA55	106	EST00108	M62052	HCC61	170	EST00363	M62295	HCC101	220	EST00183	M62126	HCC147
44	EST00051	M62002	HFA56	107	EST00109	M62053	HCC62	171	EST00364	M62296	HCC102	221	EST00184	M62127	HCC148
45	EST00052	M62003	HFA57	108	EST00110	M62054	HCC63	172	EST00365	M62297	HCC103	222	EST00185	M62128	HCC149
46	EST00053	M62004	HFA58	109	EST00111	M62055	HCC64	173	EST00366	M62298	HCC104	223	EST00186	M62129	HCC150
47	EST00054	M62005	HFA59	110	EST00112	M62056	HCC65	174	EST00367	M62299	HCC105	224	EST00187	M62130	HCC151
48	EST00055	M62006	HFA60	111	EST00113	M62057	HCC66	175	EST00368	M62300	HCC106	225	EST00188	M62131	HCC152
49	EST00056	M62007	HFA61	112	EST00114	M62058	HCC67	176	EST00369	M62301	HCC107	226	EST00189	M62132	HCC153
50	EST00057	M62008	HFA62	113	EST00115	M62059	HCC68	177	EST00370	M62302	HCC108	227	EST00190	M62133	HCC154
51	EST00058	M62009	HFA63	114	EST00116	M62060	HCC69	178	EST00371	M62303	HCC109	228	EST00191	M62134	HCC155
52	EST00059	M62010	HFA64	115	EST00117	M62061	HCC70	179	EST00372	M62304	HCC110	229	EST00192	M62135	HCC156
53	EST00060	M62011	HFA65	116	EST00118	M62062	HCC71	180	EST00373	M62305	HCC111	230	EST00193	M62136	HCC157
54	EST00061	M62012	HFA66	117	EST00119	M62063	HCC72	181	EST00374	M62306	HCC112	231	EST00194	M62137	HCC158
55	EST00062	M62013	HFA67	118	EST00120	M62064	HCC73	182	EST00375	M62307	HCC113	232	EST00195	M62138	HCC159
56	EST00063	M62014	HFA68	119	EST00121	M62065	HCC74	183	EST00376	M62308	HCC114	233	EST00196	M62139	HCC160
57	EST00064	M62015	HFA69	120	EST00122	M62066	HCC75	184	EST00377	M62309	HCC115	234	EST00197	M62140	HCC161
58	EST00065	M62016	HFA70	121	EST00123	M62067	HCC76	185	EST00378	M62310	HCC116	235	EST00198	M62141	HCC162
59	EST00066	M62017	HFA71	122	EST00124	M62068	HCC77	186	EST00379	M62311	HCC117	236	EST00199	M62142	HCC163
60	EST00067	M62018	HFA72	123	EST00125	M62069	HCC78	187	EST00380	M62312	HCC118	237	EST00200	M62143	HCC164
61	EST00068	M62019	HFA73	124	EST00126	M62070	HCC79	188	EST00381	M62313	HCC119	238	EST00201	M62144	HCC165
62	EST00069	M62020	HFA74	125	EST00127	M62071	HCC80	189	EST00382	M62314	HCC120	239	EST00202	M62145	HCC166
63	EST00070	M62021	HFA75	126	EST00128	M62072	HCC81	190	EST00383	M62315	HCC121	240	EST00203	M62146	HCC167

SUBSTITUTE SHEET

- 98 -

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
182	EST000329	M62261	HHC159	317	EST000379	M78231	HHC8A6	361	EST000416	M78269	HHC8A10	371	EST000426	M78276	HHC8A11
183	EST000148	M62089	HHC161	318	EST000380	M78232	HHC8A7	362	EST000417	M78270	HHC8A11	372	EST000427	M78277	HHC8A11
184	EST000149	M62090	HHC162	319	EST000381	M78233	HHC8A9	363	EST000418	M78271	HHC8A11	373	EST000428	M78278	HHC8A11
185	EST000150	M62091	HHC173	320	EST000382	M78234	HHC8A9	364	EST000419	M78272	HHC8A11	374	EST000429	M78279	HHC8A11
186	EST000151	M62092	HHC173	321	EST000383	M78235	HHC8A9	365	EST000420	M78273	HHC8A11	375	EST000430	M78280	HHC8A11
187	EST000152	M62093	HHC179	322	EST000384	M78236	HHC8A9	366	EST000421	M78274	HHC8A11	376	EST000431	M78281	HHC8A11
188	EST000250	M62195	HHC184	323	EST000385	M78237	HHC8A9	367	EST000422	M78275	HHC8A11	377	EST000432	M78282	HHC8A11
189	EST000282	M62196	HHC184	324	EST000386	M78238	HHC8A9	368	EST000423	M78276	HHC8A11	378	EST000433	M78283	HHC8A11
190	EST000153	M62094	HHC186	325	EST000387	M78239	HHC8A9	369	EST000424	M78277	HHC8A11	379	EST000434	M78284	HHC8A11
191	EST000154	M62095	HHC188	326	EST000388	M78240	HHC8A9	370	EST000425	M78278	HHC8A11	380	EST000435	M78285	HHC8A11
192	EST000155	M62096	HHC190	327	EST000389	M78241	HHC8A9	371	EST000426	M78279	HHC8A11	381	EST000436	M78286	HHC8A11
193	EST000156	M62097	HHC192	328	EST000390	M78242	HHC8A9	372	EST000427	M78280	HHC8A11	382	EST000437	M78287	HHC8A11
194	EST000157	M62098	HHC193	329	EST000391	M78243	HHC8A9	373	EST000428	M78281	HHC8A11	383	EST000438	M78288	HHC8A11
195	EST000158	M62099	HHC194	330	EST000392	M78244	HHC8A9	374	EST000429	M78282	HHC8A11	384	EST000439	M78289	HHC8A11
196	EST000159	M62100	HHC195	331	EST000393	M78245	HHC8A9	375	EST000430	M78283	HHC8A11	385	EST000440	M78290	HHC8A11
197	EST000160	M62101	HHC197	332	EST000394	M78246	HHC8A9	376	EST000431	M78284	HHC8A11	386	EST000441	M78291	HHC8A11
198	EST000161	M62102	HHC199	333	EST000395	M78247	HHC8A9	377	EST000432	M78285	HHC8A11	387	EST000442	M78292	HHC8A11
199	EST000162	M62103	HHC113	334	EST000396	M78248	HHC8A9	378	EST000433	M78286	HHC8A11	388	EST000443	M78293	HHC8A11
200	EST000163	M62104	HHC117	335	EST000397	M78249	HHC8A9	379	EST000434	M78287	HHC8A11	389	EST000444	M78294	HHC8A11
201	EST000164	M62105	HHC117	336	EST000398	M78250	HHC8A9	380	EST000435	M78288	HHC8A11	390	EST000445	M78295	HHC8A11
202	EST000235	M62106	HHC130	337	EST000399	M78251	HHC8A9	381	EST000436	M78289	HHC8A11	391	EST000446	M78296	HHC8A11
203	EST000235	M62107	HHC130	338	EST000400	M78252	HHC8A9	382	EST000437	M78290	HHC8A11	392	EST000447	M78297	HHC8A11
204	EST000235	M62108	HHC130	339	EST000401	M78253	HHC8A9	383	EST000438	M78291	HHC8A11	393	EST000448	M78298	HHC8A11
205	EST000165	M62109	HHC135	340	EST000402	M78254	HHC8A9	384	EST000439	M78292	HHC8A11	394	EST000449	M78299	HHC8A11
206	EST000166	M62110	HHC135	341	EST000403	M78255	HHC8A9	385	EST000440	M78293	HHC8A11	395	EST000450	M78300	HHC8A11
207	EST000167	M62111	HHC136	342	EST000404	M78256	HHC8A9	386	EST000441	M78294	HHC8A11	396	EST000451	M78301	HHC8A11
208	EST000250	M62112	HHC136	343	EST000405	M78257	HHC8A9	387	EST000442	M78295	HHC8A11	397	EST000452	M78302	HHC8A11
209	EST000331	M62113	HHC142	344	EST000406	M78258	HHC8A9	388	EST000443	M78296	HHC8A11	398	EST000453	M78303	HHC8A11
210	EST000168	M62114	HHC147	345	EST000407	M78259	HHC8A9	389	EST000444	M78297	HHC8A11	399	EST000454	M78304	HHC8A11
211	EST000332	M62115	HHC148	346	EST000408	M78260	HHC8A9	390	EST000445	M78298	HHC8A11	400	EST000455	M78305	HHC8A11
212	EST000169	M62116	HHC151	347	EST000409	M78261	HHC8A9	391	EST000446	M78299	HHC8A11	401	EST000456	M78306	HHC8A11
213	EST000170	M62117	HHC151	348	EST000410	M78262	HHC8A9	392	EST000447	M78300	HHC8A11	402	EST000457	M78307	HHC8A11
214	EST000171	M62118	HHC159	349	EST000411	M78263	HHC8A9	393	EST000448	M78301	HHC8A11	403	EST000458	M78308	HHC8A11
215	EST000172	M62119	HHC160	350	EST000412	M78264	HHC8A9	394	EST000449	M78302	HHC8A11	404	EST000459	M78309	HHC8A11
216	EST000173	M62120	HHC161	351	EST000413	M78265	HHC8A9	395	EST000450	M78303	HHC8A11	405	EST000460	M78310	HHC8A11
217	EST000174	M62121	HHC161	352	EST000414	M78266	HHC8A9	396	EST000451	M78304	HHC8A11	406	EST000461	M78311	HHC8A11
218	EST000175	M62122	HHC167	353	EST000415	M78267	HHC8A9	397	EST000452	M78305	HHC8A11	407	EST000462	M78312	HHC8A11
219	EST000176	M62123	HHC173	354	EST000416	M78268	HHC8A9	398	EST000453	M78306	HHC8A11	408	EST000463	M78313	HHC8A11
220	EST000372	M62124	HHC174	355	EST000417	M78269	HHC8A9	399	EST000454	M78307	HHC8A11	409	EST000464	M78314	HHC8A11
221	EST000359	M62125	HHC178	356	EST000418	M78270	HHC8A9	400	EST000455	M78308	HHC8A11	410	EST000465	M78315	HHC8A11
222	EST000177	M62126	HHC179	357	EST000419	M78271	HHC8A9	401	EST000456	M78309	HHC8A11	411	EST000466	M78316	HHC8A11
223	EST000178	M62127	HHC180	358	EST000420	M78272	HHC8A9	402	EST000457	M78310	HHC8A11	412	EST000467	M78317	HHC8A11
224	EST000179	M62128	HHC185	359	EST000421	M78273	HHC8A9	403	EST000458	M78311	HHC8A11	413	EST000468	M78318	HHC8A11
225	EST000180	M62129	HHC185	360	EST000422	M78274	HHC8A9	404	EST000459	M78312	HHC8A11	414	EST000469	M78319	HHC8A11
226	EST000333	M62130	HHC185	361	EST000423	M78275	HHC8A9	405	EST000460	M78313	HHC8A11	415	EST000470	M78320	HHC8A11
227	EST000333	M62131	HHC185	362	EST000424	M78276	HHC8A9	406	EST000461	M78314	HHC8A11	416	EST000471	M78321	HHC8A11
228	EST000333	M62132	HHC186	363	EST000425	M78277	HHC8A9	407	EST000462	M78315	HHC8A11	417	EST000472	M78322	HHC8A11
229	EST000179	M62133	HHC186	364	EST000426	M78278	HHC8A9	408	EST000463	M78316	HHC8A11	418	EST000473	M78323	HHC8A11
230	EST000180	M62134	HHC189	365	EST000427	M78279	HHC8A9	409	EST000464	M78317	HHC8A11	419	EST000474	M78324	HHC8A11
231	EST000181	M62135	HHC192	366	EST000428	M78280	HHC8A9	410	EST000465	M78318	HHC8A11	420	EST000475	M78325	HHC8A11
232	EST000334	M62136	HHC193	367	EST000429	M78281	HHC8A9	411	EST000466	M78319	HHC8A11	421	EST000476	M78326	HHC8A11
233	EST000183	M62137	HHC196	368	EST000430	M78282	HHC8A9	412	EST000467	M78320	HHC8A11	422	EST000477	M78327	HHC8A11
234	EST000184	M62138	HHC196	369	EST000431	M78283	HHC8A9	413	EST000468	M78321	HHC8A11	423	EST000478	M78328	HHC8A11
235	EST000185	M62139	HHC196	370	EST000432	M78284	HHC8A9	414	EST000469	M78322	HHC8A11	424	EST000479	M78329	HHC8A11
236	EST000186	M62140	HHC196	371	EST000433	M78285	HHC8A9	415	EST000470	M78323	HHC8A11	425	EST000480	M78330	HHC8A11
237	EST000187	M62141	HHC196	372	EST000434	M78286	HHC8A9	416	EST000471	M78324	HHC8A11	426	EST000481	M78331	HHC8A11
238	EST000188	M62142	HHC196	373	EST000435	M78287	HHC8A9	417	EST000472	M78325	HHC8A11	427	EST000482	M78332	HHC8A11
239	EST000189	M62143	HHC196	374	EST000436	M78288	HHC8A9	418	EST000473	M78326	HHC8A11	428	EST000483	M78333	HHC8A11
240	EST000190	M62144	HHC196	375	EST000437	M78289	HHC8A9	419	EST000474	M78327	HHC8A11	429	EST000484	M78334	HHC8A11
241	EST000191	M62145	HHC196	376	EST000438	M78290	HHC8A9	420	EST000475	M78328	HHC8A11	430	EST000485	M78335	HHC8A11
242	EST000192	M62146	HHC196	377	EST000439	M78291	HHC8A9	421	EST000476	M78329	HHC8A11	431	EST000486	M78336	HHC8A11
243	EST000193	M62147	HHC196	378	EST000440	M78292	HHC8A9	422	EST000477	M78330	HHC8A11	432	EST000487	M78337	HHC8A11
244	EST000194	M62148	HHC196	379	EST000441	M78293	HHC8A9	423	EST000478	M78331	HHC8A11	433	EST000488	M78338	HHC8A11
245	EST000347	M62149	HHC196	380	EST000442	M78294	HHC8A9	424	EST000479	M78332	HHC8A11	434	EST000489	M78339	HHC8A11
246	EST000196	M62150	HHC196	381	EST000443	M78295	HHC8A9	425	EST000480	M78333	HHC8A11	435	EST000490	M78340	HHC8A11
247	EST000279	M62151	HHC196	382	EST000444	M78296	HHC8A9	426	EST000481	M78334	HHC8A11	436	EST000491	M78341	HHC8A11
248	EST000271	M62152	HHC196	383	EST000445	M78297	HHC8A9	427	EST000482	M78335	HHC8A11	437	EST000492	M78342	HHC8A11

SUBSTITUTE SHEET

- 99 -

374	EST00428	W78280	HFBA30	440	EST01454	W7870	HFCA22	507	EST00530	W78382	HFBC813	562	EST00573	W78425	HFBC891
375	EST00429	W78281	HFBA32	441	EST00481	W7872	HFCA26	508	EST00531	W78383	HFBC814	563	EST00574	W78426	HFBC892
376	EST01436	W78282	HFBA33	442	EST01456	W7873	HFCA27	509	EST01472	W7888	HFBC815				
377	EST00430	W78283	HFBA34	443	EST00482	W7874	HFCA28	510	EST00532	W7889	HFBC816				
378	EST00431	W78284	HFBA37	444	EST00483	W7875	HFCA29	511	EST00533	W7890	HFBC817				
379	EST00432	W78285	HFBA38	445	EST00484	W7876	HFCA30	512	EST00534	W7891	HFBC818				
380	EST01439	W78286	HFBA40	446	EST00485	W7877	HFCA31	513	EST00535	W7892	HFBC819				
381	EST00433	W78288	HFBA41	447	EST00486	W7878	HFCA32	514	EST00536	W7893	HFBC820				
382	EST00434	W78289	HFBA42	448	EST00487	W7879	HFCA33	515	EST00537	W7894	HFBC821				
383	EST00435	W78290	HFBA43	449	EST00488	W7880	HFCA34	516	EST00538	W7895	HFBC822				
384	EST01440	W78291	HFBA44	450	EST00489	W7881	HFCA35	517	EST00539	W7896	HFBC823				
385	EST00436	W78292	HFBA45	451	EST00490	W7882	HFCA36	518	EST00540	W7897	HFBC824				
386	EST00437	W78293	HFBA47	452	EST00491	W7883	HFCA37	519	EST00541	W7898	HFBC825				
387	EST00438	W78294	HFBA48	453	EST00492	W7884	HFCA38	520	EST00542	W7899	HFBC826				
388	EST00439	W78295	HFBA49	454	EST00493	W7885	HFCA39	521	EST00543	W7900	HFBC827				
389	EST00440	W78296	HFBA50	455	EST00494	W7886	HFCA40	522	EST00544	W7901	HFBC828				
390	EST01442	W78297	HFBA51	456	EST01835	W7887	HFCA41	523	EST01838	W7902	HFBC829				
391	EST00441	W78298	HFBA52	457	EST00495	W7888	HFCA42	524	EST00544	W7903	HFBC830				
392	EST00442	W78299	HFBA54	458	EST00496	W7889	HFCA43	525	EST00545	W7904	HFBC831				
393	EST00443	W78300	HFBA55	459	EST00497	W7890	HFCA44	526	EST00546	W7905	HFBC832				
394	EST00444	W78301	HFBA57	460	EST01457	W7891	HFCA45	527	EST00547	W7906	HFBC833				
395	EST00445	W78302	HFBA58	461	EST01836	W7892	HFCA46	528	EST00548	W7907	HFBC834				
396	EST01443	W78303	HFBA59	462	EST00498	W7893	HFCA47	529	EST00549	W7908	HFBC835				
397	EST00446	W78304	HFBA60	463	EST01459	W7894	HFCA49	530	EST01477	W7895	HFBC836				
398	EST00447	W78305	HFBA61	464	EST00499	W7895	HFCA50	531	EST00550	W7896	HFBC837				
399	EST00448	W78306	HFBA62	465	EST00500	W7896	HFCA51	532	EST00551	W7897	HFBC838				
400	EST00449	W78307	HFBA63	466	EST00501	W7897	HFCA52	533	EST00552	W7898	HFBC839				
401	EST00450	W78308	HFBA64	467	EST00502	W7898	HFCA54	534	EST01478	W7899	HFBC840				
402	EST00451	W78309	HFBA65	468	EST00503	W7899	HFCA55	535	EST00553	W7900	HFBC841				
403	EST00452	W78310	HFBA66	469	EST01460	W7900	HFCA58	536	EST00554	W7901	HFBC842				
404	EST00453	W78305	HFBA67	470	EST00504	W7901	HFCA59	537	EST00555	W7902	HFBC843				
405	EST00454	W78306	HFBA68	471	EST00505	W7902	HFCA60	538	EST00556	W7903	HFBC844				
406	EST00455	W78307	HFBA69	472	EST00506	W7903	HFCA63	539	EST00557	W7904	HFBC845				
407	EST00456	W78308	HFBA72	473	EST00507	W7904	HFCA64	540	EST00558	W7905	HFBC846				
408	EST00457	W78309	HFBA73	474	EST00508	W7905	HFCA65	541	EST00559	W7906	HFBC847				
409	EST01444	W7860	HFBA74	475	EST00509	W7906	HFCA66	542	EST00560	W7907	HFBC848				
410	EST00458	W78310	HFBA76	476	EST01463	W7907	HFCA70	543	EST01480	W7908	HFBC849				
411	EST00459	W78311	HFBA77	477	EST00510	W7908	HFCA72	544	EST00559	W7909	HFBC850				
412	EST01445	W7861	HFBA80	478	EST00511	W7909	HFCA73	545	EST00560	W7910	HFBC851				
413	EST01446	W7862	HFBA81	479	EST01464	W7910	HFCA74	546	EST01481	W7911	HFBC852				
414	EST00460	W78312	HFBA82	480	EST00512	W7911	HFCA76	547	EST01839	W7912	HFBC853				
415	EST00461	W78313	HFBA83	481	EST01465	W7912	HFCA77	548	EST00561	W7913	HFBC854				
416	EST00462	W78314	HFBA84	482	EST00513	W7913	HFCA79	549	EST00562	W7914	HFBC855				
417	EST00463	W78315	HFBA85	483	EST00514	W7914	HFCA80	550	EST00563	W7915	HFBC856				
418	EST00464	W78316	HFBA87	484	EST01466	W7915	HFCA82	551	EST00564	W7916	HFBC857				
419	EST00465	W78317	HFBA89	485	EST00515	W7916	HFCA83	552	EST00565	W7917	HFBC858				
420	EST00466	W78318	HFBA90	486	EST00516	W7917	HFCA84	553	EST00566	W7918	HFBC859				
421	EST00467	W78319	HFBA91	487	EST00517	W7918	HFCA86	554	EST00567	W7919	HFBC860				
422	EST01447	W7863	HFBA92	488	EST00518	W7919	HFCA87	555	EST01483	W7920	HFBC861				
423	EST00468	W78320	HFBA93	489	EST00519	W7920	HFCA88	556	EST00568	W7921	HFBC862				
424	EST01448	W7864	HFBA96	490	EST00520	W7921	HFCA90	557	EST00569	W7922	HFBC863				
425	EST00469	W78321	HFCA01	491	EST00521	W7922	HFCA91	558	EST01484	W7923	HFBC864				
426	EST00470	W78322	HFCA02	492	EST00522	W7923	HFCA92	559	EST00570	W7924	HFBC865				
427	EST00471	W7865	HFCA04	493	EST00523	W7924	HFCA95	560	EST01485	W7925	HFBC866				
428	EST01449	W7867	HFCA06	494	EST00524	W7925	HFCA96	561	EST00571	W7926	HFBC867				
429	EST00472	W78323	HFCA07	495	EST00525	W7926	HFCA98	562	EST00572	W7927	HFBC868				
430	EST00473	W78324	HFCA08	496	EST00526	W7927	HFCA99	563	EST00573	W7928	HFBC869				
431	EST00474	W78325	HFCA09	497	EST01467	W7928	HFCA01								
432	EST01452	W7868	HFCA11	498	EST01468	W7929	HFCA02								
433	EST00475	W78326	HFCA12	499	EST00527	W7930	HFCA03								
434	EST00476	W78327	HFCA13	500	EST02715	W7931	HFCA04								
435	EST00477	W78328	HFCA15	501	EST01469	W7932	HFCA05								
436	EST00478	W78329	HFCA16	502	EST00528	W7933	HFCA06								
437	EST00479	W78330	HFCA17	503	EST00529	W7934	HFCA07								
438	EST00480	W78331	HFCA18	504	EST01837	W7935	HFCA08								
439	EST00480	W78332	HFCA21	505	EST01471	W7936	HFCA09								
				506	EST01471	W7937	HFCA10								

SUBSTITUTE SHEET

-100-

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
564	EST00574	M78226	HFBCB92	692	EST01521	M77937	HFBCD87
565	EST00575	M78227	HFBCB93	693	EST00680	M77938	HFBCD88
566	EST00576	M78228	HFBCB94	694	EST00681	M77939	HFBCD89
567	EST00577	M78229	HFBCB95	695	EST00682	M77940	HFBCD90
568	EST00578	M78230	HFBCB96	700	EST00683	M77941	HFBCD91
569	EST00579	M78231	HFBCB97	701	EST00684	M77942	HFBCD92
570	EST00580	M78232	HFBCB98	702	EST00685	M77943	HFBCD93
571	EST00581	M78233	HFBCB99	703	EST00686	M77944	HFBCD94
572	EST00582	M78234	HFBCB00	704	EST00687	M77945	HFBCD95
573	EST00583	M78235	HFBCB01	705	EST00688	M77946	HFBCD96
574	EST00584	M78236	HFBCB02	706	EST00689	M77947	HFBCD97
575	EST00585	M78237	HFBCB03	707	EST00690	M77948	HFBCD98
576	EST00586	M78238	HFBCB04	708	EST00691	M77949	HFBCD99
577	EST00587	M78239	HFBCB05	709	EST00692	M77950	HFBCD00
578	EST00588	M78240	HFBCB06	710	EST00693	M77951	HFBCD01
579	EST00589	M78241	HFBCB07	711	EST00694	M77952	HFBCD02
580	EST00590	M78242	HFBCB08	712	EST00695	M77953	HFBCD03
581	EST00591	M78243	HFBCB09	713	EST00696	M77954	HFBCD04
582	EST00592	M78244	HFBCB10	714	EST00697	M77955	HFBCD05
583	EST00593	M78245	HFBCB11	715	EST00698	M77956	HFBCD06
584	EST00594	M78246	HFBCB12	716	EST00699	M77957	HFBCD07
585	EST00595	M78247	HFBCB13	717	EST00700	M77958	HFBCD08
586	EST00596	M78248	HFBCB14	718	EST00701	M77959	HFBCD09
587	EST00597	M78249	HFBCB15	719	EST00702	M77960	HFBCD10
588	EST00598	M78250	HFBCB16	720	EST00703	M77961	HFBCD11
589	EST00599	M78251	HFBCB17	721	EST00704	M77962	HFBCD12
590	EST00600	M78252	HFBCB18	722	EST00705	M77963	HFBCD13
591	EST00601	M78253	HFBCB19	723	EST00706	M77964	HFBCD14
592	EST00602	M78254	HFBCB20	724	EST00707	M77965	HFBCD15
593	EST00603	M78255	HFBCB21	725	EST00708	M77966	HFBCD16
594	EST00604	M78256	HFBCB22	726	EST00709	M77967	HFBCD17
595	EST00605	M78257	HFBCB23	727	EST00710	M77968	HFBCD18
596	EST00606	M78258	HFBCB24	728	EST00711	M77969	HFBCD19
597	EST00607	M78259	HFBCB25	729	EST00712	M77970	HFBCD20
598	EST00608	M78260	HFBCB26	730	EST00713	M77971	HFBCD21
599	EST00609	M78261	HFBCB27	731	EST00714	M77972	HFBCD22
600	EST00610	M78262	HFBCB28	732	EST00715	M77973	HFBCD23
601	EST00611	M78263	HFBCB29	733	EST00716	M77974	HFBCD24
602	EST00612	M78264	HFBCB30	734	EST00717	M77975	HFBCD25
603	EST00613	M78265	HFBCB31	735	EST00718	M77976	HFBCD26
604	EST00614	M78266	HFBCB32	736	EST00719	M77977	HFBCD27
605	EST00615	M78267	HFBCB33	737	EST00720	M77978	HFBCD28
606	EST00616	M78268	HFBCB34	738	EST00721	M77979	HFBCD29
607	EST00617	M78269	HFBCB35	739	EST00722	M77980	HFBCD30
608	EST00618	M78270	HFBCB36	740	EST00723	M77981	HFBCD31
609	EST00619	M78271	HFBCB37	741	EST00724	M77982	HFBCD32
610	EST00620	M78272	HFBCB38	742	EST00725	M77983	HFBCD33
611	EST00621	M78273	HFBCB39	743	EST00726	M77984	HFBCD34
612	EST00622	M78274	HFBCB40	744	EST00727	M77985	HFBCD35
613	EST00623	M78275	HFBCB41	745	EST00728	M77986	HFBCD36
614	EST00624	M78276	HFBCB42	746	EST00729	M77987	HFBCD37
615	EST00625	M78277	HFBCB43	747	EST00730	M77988	HFBCD38
616	EST00626	M78278	HFBCB44	748	EST00731	M77989	HFBCD39
617	EST00627	M78279	HFBCB45	749	EST00732	M77990	HFBCD40
618	EST00628	M78280	HFBCB46	750	EST00733	M77991	HFBCD41
619	EST00629	M78281	HFBCB47	751	EST00734	M77992	HFBCD42
620	EST00630	M78282	HFBCB48	752	EST00735	M77993	HFBCD43
621	EST00631	M78283	HFBCB49	753	EST00736	M77994	HFBCD44
622	EST00632	M78284	HFBCB50	754	EST00737	M77995	HFBCD45
623	EST00633	M78285	HFBCB51	755	EST00738	M77996	HFBCD46
624	EST00634	M78286	HFBCB52	756	EST00739	M77997	HFBCD47
625	EST00635	M78287	HFBCB53	757	EST00740	M77998	HFBCD48
626	EST00636	M78288	HFBCB54	758	EST00741	M77999	HFBCD49
627	EST00637	M78289	HFBCB55	759	EST00742	M78000	HFBCD50
628	EST00638	M78290	HFBCB56	760	EST00743	M78001	HFBCD51
629	EST00639	M78291	HFBCB57	761	EST00744	M78002	HFBCD52
630	EST00640	M78292	HFBCB58	762	EST00745	M78003	HFBCD53
631	EST00641	M78293	HFBCB59	763	EST00746	M78004	HFBCD54
632	EST00642	M78294	HFBCB60	764	EST00747	M78005	HFBCD55
633	EST00643	M78295	HFBCB61	765	EST00748	M78006	HFBCD56
634	EST00644	M78296	HFBCB62	766	EST00749	M78007	HFBCD57
635	EST00645	M78297	HFBCB63	767	EST00750	M78008	HFBCD58
636	EST00646	M78298	HFBCB64	768	EST00751	M78009	HFBCD59
637	EST00647	M78299	HFBCB65	769	EST00752	M78010	HFBCD60
638	EST00648	M78300	HFBCB66	770	EST00753	M78011	HFBCD61
639	EST00649	M78301	HFBCB67	771	EST00754	M78012	HFBCD62
640	EST00650	M78302	HFBCB68	772	EST00755	M78013	HFBCD63
641	EST00651	M78303	HFBCB69	773	EST00756	M78014	HFBCD64
642	EST00652	M78304	HFBCB70	774	EST00757	M78015	HFBCD65
643	EST00653	M78305	HFBCB71	775	EST00758	M78016	HFBCD66
644	EST00654	M78306	HFBCB72	776	EST00759	M78017	HFBCD67
645	EST00655	M78307	HFBCB73	777	EST00760	M78018	HFBCD68
646	EST00656	M78308	HFBCB74	778	EST00761	M78019	HFBCD69
647	EST00657	M78309	HFBCB75	779	EST00762	M78020	HFBCD70
648	EST00658	M78310	HFBCB76	780	EST00763	M78021	HFBCD71
649	EST00659	M78311	HFBCB77	781	EST00764	M78022	HFBCD72
650	EST00660	M78312	HFBCB78	782	EST00765	M78023	HFBCD73
651	EST00661	M78313	HFBCB79	783	EST00766	M78024	HFBCD74
652	EST00662	M78314	HFBCB80	784	EST00767	M78025	HFBCD75
653	EST00663	M78315	HFBCB81	785	EST00768	M78026	HFBCD76
654	EST00664	M78316	HFBCB82	786	EST00769	M78027	HFBCD77
655	EST00665	M78317	HFBCB83	787	EST00770	M78028	HFBCD78
656	EST00666	M78318	HFBCB84	788	EST00771	M78029	HFBCD79
657	EST00667	M78319	HFBCB85	789	EST00772	M78030	HFBCD80
658	EST00668	M78320	HFBCB86	790	EST00773	M78031	HFBCD81
659	EST00669	M78321	HFBCB87	791	EST00774	M78032	HFBCD82
660	EST00670	M78322	HFBCB88	792	EST00775	M78033	HFBCD83
661	EST00671	M78323	HFBCB89	793	EST00776	M78034	HFBCD84
662	EST00672	M78324	HFBCB90	794	EST00777	M78035	HFBCD85
663	EST00673	M78325	HFBCB91	795	EST00778	M78036	HFBCD86
664	EST00674	M78326	HFBCB92	796	EST00779	M78037	HFBCD87
665	EST00675	M78327	HFBCB93	797	EST00780	M78038	HFBCD88
666	EST00676	M78328	HFBCB94	798	EST00781	M78039	HFBCD89
667	EST00677	M78329	HFBCB95	799	EST00782	M78040	HFBCD90
668	EST00678	M78330	HFBCB96	800	EST00783	M78041	HFBCD91
669	EST00679	M78331	HFBCB97	801	EST00784	M78042	HFBCD92
670	EST00680	M78332	HFBCB98	802	EST00785	M78043	HFBCD93
671	EST00681	M78333	HFBCB99	803	EST00786	M78044	HFBCD94
672	EST00682	M78334	HFBCB00	804	EST00787	M78045	HFBCD95
673	EST00683	M78335	HFBCB01	805	EST00788	M78046	HFBCD96
674	EST00684	M78336	HFBCB02	806	EST00789	M78047	HFBCD97
675	EST00685	M78337	HFBCB03	807	EST00790	M78048	HFBCD98
676	EST00686	M78338	HFBCB04	808	EST00791	M78049	HFBCD99
677	EST00687	M78339	HFBCB05	809	EST00792	M78050	HFBCD00
678	EST00688	M78340	HFBCB06	810	EST00793	M78051	HFBCD01
679	EST00689	M78341	HFBCB07	811	EST00794	M78052	HFBCD02
680	EST00690	M78342	HFBCB08	812	EST00795	M78053	HFBCD03
681	EST00691	M78343	HFBCB09	813	EST00796	M78054	HFBCD04
682	EST00692	M78344	HFBCB10	814	EST00797	M78055	HFBCD05
683	EST00693	M78345	HFBCB11	815	EST00798	M78056	HFBCD06
684	EST00694	M78346	HFBCB12	816	EST00799	M78057	HFBCD07
685	EST00695	M78347	HFBCB13	817	EST00800	M78058	HFBCD08
686	EST00696	M78348	HFBCB14	818	EST00801	M78059	HFBCD09
687	EST00697	M78349	HFBCB15	819	EST00802	M78060	HFBCD10
688	EST00698	M78350	HFBCB16	820	EST00803	M78061	HFBCD11
689	EST00699	M78351	HFBCB17	821	EST00804	M78062	HFBCD12
690	EST00700	M78352	HFBCB18	822	EST00805	M78063	HFBCD13
691	EST00701	M78353	HFBCB19	823	EST00806	M78064	HFBCD14
692	EST00702	M78354	HFBCB20	824	EST00807	M78065	HFBCD15
693	EST00703	M78355	HFBCB21	825	EST00808	M78066	HFBCD16
694	EST00704	M78356	HFBCB22	826	EST00809	M78067	HFBCD17
695	EST00705	M78357	HFBCB23	827	EST00810	M78068	HFBCD18

SUBSTITUTE SHEET

-101-

SEQ ID	EST #	GB#	Clone	SEQ ID	EST #	GB#	Clone	SEQ ID	EST #	GB#	Clone	SEQ ID	EST #	GB#	Clone	SEQ ID	EST #	GB#	Clone
753	EST00721	W78573	HFBC66	819	EST01859	M85345	HFBCG01	941	EST01945	M85429	HFBC108	941	EST01945	M85429	HFBC108	941	EST01945	M85429	HFBC108
754	EST00722	W78574	HFBC69	820	EST01860	M85346	HFBCG02	932	EST01932	M85420	HFBC109	932	EST01932	M85420	HFBC109	932	EST01932	M85420	HFBC109
755	EST00723	W78575	HFBC72	821	EST01862	M85348	HFBCG09	933	EST01933	M85421	HFBC110	933	EST01933	M85421	HFBC110	933	EST01933	M85421	HFBC110
756	EST01541	W77957	HFBC73	822	EST01863	M85349	HFBCG10	934	EST01934	M85422	HFBC111	934	EST01934	M85422	HFBC111	934	EST01934	M85422	HFBC111
757	EST01542	W77958	HFBC74	823	EST01864	M85350	HFBCG11	935	EST01935	M85423	HFBC112	935	EST01935	M85423	HFBC112	935	EST01935	M85423	HFBC112
758	EST00724	W78576	HFBC77	824	EST01865	M85351	HFBCG12	936	EST01936	M85424	HFBC113	936	EST01936	M85424	HFBC113	936	EST01936	M85424	HFBC113
759	EST00725	W78577	HFBC78	825	EST01866	M85352	HFBCG13	937	EST01937	M85425	HFBC114	937	EST01937	M85425	HFBC114	937	EST01937	M85425	HFBC114
760	EST00726	W78578	HFBC80	826	EST01867	M85353	HFBCG15	938	EST01938	M85426	HFBC115	938	EST01938	M85426	HFBC115	938	EST01938	M85426	HFBC115
761	EST01544	W77960	HFBC82	827	EST01868	M85354	HFBCG16	939	EST01939	M85427	HFBC116	939	EST01939	M85427	HFBC116	939	EST01939	M85427	HFBC116
762	EST00727	W78579	HFBC83	828	EST01869	M85355	HFBCG17	940	EST01940	M85428	HFBC117	940	EST01940	M85428	HFBC117	940	EST01940	M85428	HFBC117
763	EST00728	W78580	HFBC84	829	EST01870	M85356	HFBCG19	941	EST01941	M85429	HFBC118	941	EST01941	M85429	HFBC118	941	EST01941	M85429	HFBC118
764	EST00729	W78581	HFBC85	830	EST01871	M85357	HFBCG20	942	EST01942	M85430	HFBC119	942	EST01942	M85430	HFBC119	942	EST01942	M85430	HFBC119
765	EST00730	W78582	HFBC86	831	EST01872	M85358	HFBCG21	943	EST01943	M85431	HFBC120	943	EST01943	M85431	HFBC120	943	EST01943	M85431	HFBC120
766	EST00731	W78583	HFBC87	832	EST01873	M85359	HFBCG22	944	EST01944	M85432	HFBC121	944	EST01944	M85432	HFBC121	944	EST01944	M85432	HFBC121
767	EST00732	W78584	HFBC88	833	EST01874	M85360	HFBCG23	945	EST01945	M85433	HFBC122	945	EST01945	M85433	HFBC122	945	EST01945	M85433	HFBC122
768	EST00733	W78585	HFBC89	834	EST01875	M85361	HFBCG24	946	EST01946	M85434	HFBC123	946	EST01946	M85434	HFBC123	946	EST01946	M85434	HFBC123
769	EST00734	W78586	HFBC90	835	EST01876	M85362	HFBCG25	947	EST01947	M85435	HFBC124	947	EST01947	M85435	HFBC124	947	EST01947	M85435	HFBC124
770	EST00735	W78587	HFBC91	836	EST01877	M85363	HFBCG26	948	EST01948	M85436	HFBC125	948	EST01948	M85436	HFBC125	948	EST01948	M85436	HFBC125
771	EST01546	W77962	HFBC93	837	EST01878	M85364	HFBCG27	949	EST01949	M85437	HFBC126	949	EST01949	M85437	HFBC126	949	EST01949	M85437	HFBC126
772	EST00736	W78588	HFBC94	838	EST01879	M85365	HFBCG28	950	EST01950	M85438	HFBC127	950	EST01950	M85438	HFBC127	950	EST01950	M85438	HFBC127
773	EST01547	W77963	HFBC96	839	EST01880	M85366	HFBCG29	951	EST01951	M85439	HFBC128	951	EST01951	M85439	HFBC128	951	EST01951	M85439	HFBC128
774	EST01548	W77964	HFBCF01	840	EST01881	M85367	HFBCG30	952	EST01952	M85440	HFBC129	952	EST01952	M85440	HFBC129	952	EST01952	M85440	HFBC129
775	EST00737	W78589	HFBCF03	841	EST01882	M85368	HFBCG31	953	EST01953	M85441	HFBC130	953	EST01953	M85441	HFBC130	953	EST01953	M85441	HFBC130
776	EST00738	W78590	HFBCF04	842	EST01883	M85369	HFBCG32	954	EST01954	M85442	HFBC131	954	EST01954	M85442	HFBC131	954	EST01954	M85442	HFBC131
777	EST00739	W78591	HFBCF05	843	EST01884	M85370	HFBCG33	955	EST01955	M85443	HFBC132	955	EST01955	M85443	HFBC132	955	EST01955	M85443	HFBC132
778	EST00740	W78592	HFBCF06	844	EST01885	M85371	HFBCG34	956	EST01956	M85444	HFBC133	956	EST01956	M85444	HFBC133	956	EST01956	M85444	HFBC133
779	EST00741	W78593	HFBCF07	845	EST01886	M85372	HFBCG35	957	EST01957	M85445	HFBC134	957	EST01957	M85445	HFBC134	957	EST01957	M85445	HFBC134
780	EST01549	W77965	HFBCF13	846	EST01887	M85373	HFBCG36	958	EST01958	M85446	HFBC135	958	EST01958	M85446	HFBC135	958	EST01958	M85446	HFBC135
781	EST01550	W77966	HFBCF14	847	EST01888	M85374	HFBCG37	959	EST01959	M85447	HFBC136	959	EST01959	M85447	HFBC136	959	EST01959	M85447	HFBC136
782	EST01551	W77967	HFBCF16	848	EST01889	M85375	HFBCG38	960	EST01960	M85448	HFBC137	960	EST01960	M85448	HFBC137	960	EST01960	M85448	HFBC137
783	EST01552	W77968	HFBCF23	849	EST01890	M85376	HFBCG39	961	EST01961	M85449	HFBC138	961	EST01961	M85449	HFBC138	961	EST01961	M85449	HFBC138
784	EST01852	M85338	HFBCF41	850	EST01891	M85377	HFBCG40	962	EST01962	M85450	HFBC139	962	EST01962	M85450	HFBC139	962	EST01962	M85450	HFBC139
785	EST01553	W77969	HFBCF42	851	EST01892	M85378	HFBCG41	963	EST01963	M85451	HFBC140	963	EST01963	M85451	HFBC140	963	EST01963	M85451	HFBC140
786	EST00742	W78594	HFBCF43	852	EST01893	M85379	HFBCG42	964	EST01964	M85452	HFBC141	964	EST01964	M85452	HFBC141	964	EST01964	M85452	HFBC141
787	EST00743	W78595	HFBCF44	853	EST01894	M85380	HFBCG43	965	EST01965	M85453	HFBC142	965	EST01965	M85453	HFBC142	965	EST01965	M85453	HFBC142
788	EST00744	W78596	HFBCF45	854	EST01895	M85381	HFBCG44	966	EST01966	M85454	HFBC143	966	EST01966	M85454	HFBC143	966	EST01966	M85454	HFBC143
789	EST00745	W78597	HFBCF46	855	EST01896	M85382	HFBCG45	967	EST01967	M85455	HFBC144	967	EST01967	M85455	HFBC144	967	EST01967	M85455	HFBC144
790	EST01554	W77970	HFBCF47	856	EST01897	M85383	HFBCG46	968	EST01968	M85456	HFBC145	968	EST01968	M85456	HFBC145	968	EST01968	M85456	HFBC145
791	EST00746	W78598	HFBCF48	857	EST01898	M85384	HFBCG47	969	EST01969	M85457	HFBC146	969	EST01969	M85457	HFBC146	969	EST01969	M85457	HFBC146
792	EST00747	W78599	HFBCF49	858	EST01899	M85385	HFBCG48	970	EST01970	M85458	HFBC147	970	EST01970	M85458	HFBC147	970	EST01970	M85458	HFBC147
793	EST00748	W78600	HFBCF50	859	EST01900	M85386	HFBCG49	971	EST01971	M85459	HFBC148	971	EST01971	M85459	HFBC148	971	EST01971	M85459	HFBC148
794	EST01555	W77971	HFBCF51	860	EST01901	M85387	HFBCG50	972	EST01972	M85460	HFBC149	972	EST01972	M85460	HFBC149	972	EST01972	M85460	HFBC149
795	EST00749	W78601	HFBCF52	861	EST01902	M85388	HFBCG51	973	EST01973	M85461	HFBC150	973	EST01973	M85461	HFBC150	973	EST01973	M85461	HFBC150
796	EST00750	W78602	HFBCF53	862	EST01903	M85389	HFBCG52	974	EST01974	M85462	HFBC151	974	EST01974	M85462	HFBC151	974	EST01974	M85462	HFBC151
797	EST00751	W78603	HFBCF54	863	EST01904	M85390	HFBCG53	975	EST01975	M85463	HFBC152	975	EST01975	M85463	HFBC152	975	EST01975	M85463	HFBC152
798	EST01853	M85339	HFBCF56	864	EST01905	M85391	HFBCG54	976	EST01976	M85464	HFBC153	976	EST01976	M85464	HFBC153	976	EST01976	M85464	HFBC153
799	EST00752	W78604	HFBCF57	865	EST01906	M85392	HFBCG55	977	EST01977	M85465	HFBC154	977	EST01977	M85465	HFBC154	977	EST01977	M85465	HFBC154
800	EST00753	W78605	HFBCF58	866	EST01907	M85393	HFBCG56	978	EST01978	M85466	HFBC155	978	EST01978	M85466	HFBC155	978	EST01978	M85466	HFBC155
801	EST00754	W78606	HFBCF59	867	EST01908	M85394	HFBCG57	979	EST01979	M85467	HFBC156	979	EST01979	M85467	HFBC156	979	EST01979	M85467	HFBC156
802	EST00755	W78607	HFBCF60	868	EST01909	M85395	HFBCG58	980	EST01980	M85468	HFBC157	980	EST01980	M85468	HFBC157	980	EST01980	M85468	HFBC157
803	EST00756	W78608	HFBCF63	869	EST01910	M85396	HFBCG59	981	EST01981	M85469	HFBC158	981	EST01981	M85469	HFBC158	981	EST01981	M85469	HFBC158
804	EST00757	W78609	HFBCF68	870	EST01911	M85397	HFBCG60	982	EST01982	M85470	HFBC159	982	EST01982	M85470	HFBC159	982	EST01982	M85470	HFBC159
805	EST00758	W78610	HFBCF73	871	EST01912	M85398	HFBCG61	983	EST01983	M85471	HFBC160	983	EST01983	M85471	HFBC160	983	EST01983	M85471	HFBC160
806	EST00759	W78611	HFBCF74	872	EST01913	M85399	HFBCG62	984	EST01984	M85472	HFBC161	984	EST01984	M85472	HFBC161	984	EST01984	M85472	HFBC161
807	EST00760	W78612	HFBCF75	873	EST01914	M85400	HFBCG63	985	EST01985	M85473	HFBC162	985	EST01985	M85473	HFBC162	985	EST01985	M85473	HFBC162
808	EST00761	W78613	HFBCF76	874	EST01915	M85401	HFBCG64	986	EST01986	M85474	HFBC163	986	EST01986	M85474	HFBC163	986	EST01986	M85474	HFBC163
809	EST00762	W78614	HFBCF81	875	EST01916	M85402	HFBCG65	987	EST01987	M85475	HFBC164	987	EST01987	M85475	HFBC164	987	EST01987	M85475	HFBC164
810	EST00763	W78615	HFBCF84	876	EST01917	M85403	HFBCG66	988	EST01988	M85476	HFBC165	988	EST01988	M85476	HFBC165	988	EST01988	M85476	HFBC165
811	EST00764	W78616	HFBCF85	877	EST01918	M85404	HFBCG67	989	EST01989	M85477	HFBC166	989	EST01989	M85477	HFBC166	989	EST01989	M85477	HFBC166
812	EST01854	M85340	HFBCF86	878	EST01919	M85405	HFBCG68	990	EST01990	M85478	HFBC167	990	EST01990	M85478	HFBC167	990	EST01990	M85478	HFBC167

-102-

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
942	EST01947	M85431	HFBC11	1008	EST02022	M85506	HFBC12	1074	EST02092	M85576	HFBC29
943	EST01948	M85432	HFBC112	1009	EST02023	M85507	HFBC17	1075	EST02093	M85577	HFBC30
944	EST01949	M85433	HFBC113	1010	EST02024	M85508	HFBC178	1076	EST02094	M85578	HFBC31
945	EST01950	M85434	HFBC114	1011	EST02025	M85509	HFBC120	1077	EST02095	M85579	HFBC32
946	EST01951	M85435	HFBC115	1012	EST02026	M85510	HFBC134	1078	EST02096	M85580	HFBC33
947	EST01952	M85436	HFBC116	1013	EST02027	M85511	HFBC135	1079	EST02097	M85581	HFBC34
948	EST01953	M85437	HFBC117	1014	EST02028	M85512	HFBC139	1080	EST02098	M85582	HFBC35
949	EST01954	M85438	HFBC118	1015	EST02029	M85513	HFBC140	1081	EST02099	M85583	HFBC36
950	EST01955	M85439	HFBC119	1016	EST02030	M85514	HFBC141	1082	EST02100	M85584	HFBC37
951	EST01956	M85440	HFBC120	1017	EST02031	M85515	HFBC142	1083	EST02101	M85585	HFBC38
952	EST01957	M85441	HFBC121	1018	EST02032	M85516	HFBC149	1084	EST02102	M85586	HFBC39
953	EST01958	M85442	HFBC122	1019	EST02033	M85517	HFBC150	1085	EST02103	M85587	HFBC40
954	EST01959	M85443	HFBC123	1020	EST02034	M85518	HFBC151	1086	EST02104	M85588	HFBC41
955	EST01960	M85444	HFBC124	1021	EST02035	M85519	HFBC152	1087	EST02105	M85589	HFBC42
956	EST01961	M85445	HFBC125	1022	EST02036	M85520	HFBC153	1088	EST02106	M85590	HFBC43
957	EST01962	M85446	HFBC126	1023	EST02037	M85521	HFBC154	1089	EST02107	M85591	HFBC44
958	EST01963	M85447	HFBC127	1024	EST02038	M85522	HFBC155	1090	EST02108	M85592	HFBC45
959	EST01964	M85448	HFBC128	1025	EST02039	M85523	HFBC156	1091	EST02109	M85593	HFBC46
960	EST01965	M85449	HFBC129	1026	EST02040	M85524	HFBC157	1092	EST02110	M85594	HFBC47
961	EST01966	M85450	HFBC130	1027	EST02041	M85525	HFBC158	1093	EST02111	M85595	HFBC48
962	EST01967	M85451	HFBC131	1028	EST02042	M85526	HFBC159	1094	EST02112	M85596	HFBC49
963	EST01968	M85452	HFBC132	1029	EST02043	M85527	HFBC160	1095	EST02113	M85597	HFBC50
964	EST01969	M85453	HFBC133	1030	EST02044	M85528	HFBC161	1096	EST02114	M85598	HFBC51
965	EST01970	M85454	HFBC134	1031	EST02045	M85529	HFBC162	1097	EST02115	M85599	HFBC52
966	EST01971	M85455	HFBC135	1032	EST02046	M85530	HFBC163	1098	EST02116	M85600	HFBC53
967	EST01972	M85456	HFBC136	1033	EST02047	M85531	HFBC164	1099	EST02117	M85601	HFBC54
968	EST01973	M85457	HFBC137	1034	EST02048	M85532	HFBC165	1100	EST02118	M85602	HFBC55
969	EST01974	M85458	HFBC138	1035	EST02049	M85533	HFBC166	1101	EST02119	M85603	HFBC56
970	EST01975	M85459	HFBC139	1036	EST02050	M85534	HFBC167	1102	EST02120	M85604	HFBC57
971	EST01976	M85460	HFBC140	1037	EST02051	M85535	HFBC168	1103	EST02121	M85605	HFBC58
972	EST01977	M85461	HFBC141	1038	EST02052	M85536	HFBC169	1104	EST02122	M85606	HFBC59
973	EST01978	M85462	HFBC142	1039	EST02053	M85537	HFBC170	1105	EST02123	M85607	HFBC60
974	EST01979	M85463	HFBC143	1040	EST02054	M85538	HFBC171	1106	EST02124	M85608	HFBC61
975	EST01980	M85464	HFBC144	1041	EST02055	M85539	HFBC172	1107	EST02125	M85609	HFBC62
976	EST01981	M85465	HFBC145	1042	EST02056	M85540	HFBC173	1108	EST02126	M85610	HFBC63
977	EST01982	M85466	HFBC146	1043	EST02057	M85541	HFBC174	1109	EST02127	M85611	HFBC64
978	EST01983	M85467	HFBC147	1044	EST02058	M85542	HFBC175	1110	EST02128	M85612	HFBC65
979	EST01984	M85468	HFBC148	1045	EST02059	M85543	HFBC176	1111	EST02129	M85613	HFBC66
980	EST01985	M85469	HFBC149	1046	EST02060	M85544	HFBC177	1112	EST02130	M85614	HFBC67
981	EST01986	M85470	HFBC150	1047	EST02061	M85545	HFBC178	1113	EST02131	M85615	HFBC68
982	EST01987	M85471	HFBC151	1048	EST02062	M85546	HFBC179	1114	EST02132	M85616	HFBC69
983	EST01988	M85472	HFBC152	1049	EST02063	M85547	HFBC180	1115	EST02133	M85617	HFBC70
984	EST01989	M85473	HFBC153	1050	EST02064	M85548	HFBC181	1116	EST02134	M85618	HFBC71
985	EST01990	M85474	HFBC154	1051	EST02065	M85549	HFBC182	1117	EST02135	M85619	HFBC72
986	EST01991	M85475	HFBC155	1052	EST02066	M85550	HFBC183	1118	EST02136	M85620	HFBC73
987	EST01992	M85476	HFBC156	1053	EST02067	M85551	HFBC184	1119	EST02137	M85621	HFBC74
988	EST01993	M85477	HFBC157	1054	EST02068	M85552	HFBC185	1120	EST02138	M85622	HFBC75
989	EST01994	M85478	HFBC158	1055	EST02069	M85553	HFBC186	1121	EST02139	M85623	HFBC76
990	EST01995	M85479	HFBC159	1056	EST02070	M85554	HFBC187	1122	EST02140	M85624	HFBC77
991	EST01996	M85480	HFBC160	1057	EST02071	M85555	HFBC188	1123	EST02141	M85625	HFBC78
992	EST01997	M85481	HFBC161	1058	EST02072	M85556	HFBC189	1124	EST02142	M85626	HFBC79
993	EST01998	M85482	HFBC162	1059	EST02073	M85557	HFBC190	1125	EST02143	M85627	HFBC80
994	EST01999	M85483	HFBC163	1060	EST02074	M85558	HFBC191	1126	EST02144	M85628	HFBC81
995	EST02000	M85484	HFBC164	1061	EST02075	M85559	HFBC192	1127	EST02145	M85629	HFBC82
996	EST02001	M85485	HFBC165	1062	EST02076	M85560	HFBC193	1128	EST02146	M85630	HFBC83
997	EST02002	M85486	HFBC166	1063	EST02077	M85561	HFBC194	1129	EST02147	M85631	HFBC84
998	EST02003	M85487	HFBC167	1064	EST02078	M85562	HFBC195	1130	EST02148	M85632	HFBC85
999	EST02004	M85488	HFBC168	1065	EST02079	M85563	HFBC196				
1000	EST02005	M85489	HFBC169	1066	EST02080	M85564	HFBC197				
1001	EST02006	M85490	HFBC170	1067	EST02081	M85565	HFBC198				
1002	EST02007	M85491	HFBC171	1068	EST02082	M85566	HFBC199				
1003	EST02008	M85492	HFBC172	1069	EST02083	M85567	HFBC200				
1004	EST02009	M85493	HFBC173	1070	EST02084	M85568	HFBC201				
1005	EST02010	M85494	HFBC174	1071	EST02085	M85569	HFBC202				
1006	EST02011	M85495	HFBC175	1072	EST02086	M85570	HFBC203				
1007	EST02012	M85496	HFBC176	1073	EST02087	M85571	HFBC204				
1008	EST02013	M85497	HFBC177	1074	EST02088	M85572	HFBC205				
1009	EST02014	M85498	HFBC178	1075	EST02089	M85573	HFBC206				
1010	EST02015	M85499	HFBC179	1076	EST02090	M85574	HFBC207				
1011	EST02016	M85500	HFBC180	1077	EST02091	M85575	HFBC208				
1012	EST02017	M85501	HFBC181	1078	EST02092	M85576	HFBC209				
1013	EST02018	M85502	HFBC182	1079	EST02093	M85577	HFBC210				
1014	EST02019	M85503	HFBC183	1080	EST02094	M85578	HFBC211				
1015	EST02020	M85504	HFBC184	1081	EST02095	M85579	HFBC212				
1016	EST02021	M85505	HFBC185	1082	EST02096	M85580	HFBC213				
1017	EST02022	M85506	HFBC186	1083	EST02097	M85581	HFBC214				
1018	EST02023	M85507	HFBC187	1084	EST02098	M85582	HFBC215				
1019	EST02024	M85508	HFBC188	1085	EST02099	M85583	HFBC216				
1020	EST02025	M85509	HFBC189	1086	EST02100	M85584	HFBC217				
1021	EST02026	M85510	HFBC190	1087	EST02101	M85585	HFBC218				
1022	EST02027	M85511	HFBC191	1088	EST02102	M85586	HFBC219				
1023	EST02028	M85512	HFBC192	1089	EST02103	M85587	HFBC220				
1024	EST02029	M85513	HFBC193	1090	EST02104	M85588	HFBC221				
1025	EST02030	M85514	HFBC194	1091	EST02105	M85589	HFBC222				
1026	EST02031	M85515	HFBC195	1092	EST02106	M85590	HFBC223				
1027	EST02032	M85516	HFBC196	1093	EST02107	M85591	HFBC224				
1028	EST02033	M85517	HFBC197	1094	EST02108	M85592	HFBC225				
1029	EST02034	M85518	HFBC198	1095	EST02109	M85593	HFBC226				
1030	EST02035	M85519	HFBC199	1096	EST02110	M85594	HFBC227				
1031	EST02036	M85520	HFBC200	1097	EST02111	M85595	HFBC228				
1032	EST02037	M85521	HFBC201	1098	EST02112	M85596	HFBC229				
1033	EST02038	M85522	HFBC202	1099	EST02113	M85597	HFBC230				
1034	EST02039	M85523	HFBC203	1100	EST02114	M85598	HFBC231				
1035	EST02040	M85524	HFBC204	1101	EST02115	M85599	HFBC232				
1036	EST02041	M85525	HFBC205	1102	EST02116	M85600	HFBC233				
1037	EST02042	M85526	HFBC206	1103	EST02117	M85601	HFBC234				
1038	EST02043	M85527	HFBC207	1104	EST02118	M85602	HFBC235				
1039	EST02044	M85528	HFBC208	1105	EST02119	M85603	HFBC236				
1040	EST02045	M85529	HFBC209	1106	EST02120	M85604	HFBC237				
1041	EST02046	M85530	HFBC210	1107	EST02121	M85605	HFBC238				
1042	EST02047	M85531	HFBC211	1108	EST02122	M85606	HFBC239				
1043	EST02048	M85532	HFBC212	1109	EST02123	M85607	HFBC240				
1044	EST02049	M85533	HFBC213	1110	EST02124	M85608	HFBC241				
1045	EST02050	M85534	HFBC214	1111	EST02125	M85609	HFBC242				
1046	EST02051	M85535	HFBC215	1112	EST02126	M85610	HFBC243				
1047	EST02052	M85536	HFBC216	1113	EST02127	M85611	HFBC244				
1048	EST02053	M85537	HFBC217	1114	EST02128	M85612	HFBC245		</		

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
1131	EST02151	M85634	HFBC114	1197	EST02222	M85704	HFBC130	1252	EST02281	M85760	HFBC124
1132	EST02152	M85635	HFBC118	1198	EST02223	M85705	HFBC131	1253	EST02282	M85761	HFBC125
1133	EST02153	M85636	HFBC120	1199	EST02224	M85706	HFBC132	1254	EST02283	M85762	HFBC126
1134	EST02154	M85637	HFBC122	1200	EST02225	M85707	HFBC133	1255	EST02284	M85763	HFBC127
1135	EST02155	M85638	HFBC123	1201	EST02226	M85709	HFBC134	1256	EST02285	M85764	HFBC128
1136	EST02156	M85639	HFBC124	1202	EST02227	M85710	HFBC135	1257	EST02286	M85765	HFBC129
1137	EST02157	M85640	HFBC125	1203	EST02228	M85711	HFBC136	1258	EST02287	M85766	HFBC130
1138	EST02158	M85641	HFBC126	1204	EST02229	M85712	HFBC137	1259	EST02288	M85767	HFBC131
1139	EST02159	M85642	HFBC128	1205	EST02230	M85713	HFBC138	1260	EST02289	M85768	HFBC132
1140	EST02160	M85643	HFBC129	1206	EST02231	M85714	HFBC139	1261	EST02290	M85769	HFBC133
1141	EST02161	M85644	HFBC130	1207	EST02232	M85715	HFBC140	1262	EST02291	M85770	HFBC134
1142	EST02162	M85645	HFBC131	1208	EST02233	M85716	HFBC141	1263	EST02292	M85771	HFBC135
1143	EST02163	M85646	HFBC132	1209	EST02234	M85717	HFBC142	1264	EST02293	M85772	HFBC136
1144	EST02164	M85647	HFBC133	1210	EST02235	M85718	HFBC143	1265	EST02294	M85773	HFBC137
1145	EST02165	M85648	HFBC135	1211	EST02236	M85719	HFBC144	1266	EST02295	M85774	HFBC138
1146	EST02166	M85649	HFBC136	1212	EST02237	M85720	HFBC145	1267	EST02296	M85775	HFBC139
1147	EST02167	M85650	HFBC138	1213	EST02238	M85721	HFBC146	1268	EST02297	M85776	HFBC140
1148	EST02168	M85651	HFBC139	1214	EST02239	M85722	HFBC147	1269	EST02298	M85777	HFBC141
1149	EST02169	M85652	HFBC141	1215	EST02240	M85723	HFBC148	1270	EST02299	M85778	HFBC142
1150	EST02170	M85653	HFBC142	1216	EST02241	M85724	HFBC149	1271	EST02300	M85779	HFBC143
1151	EST02171	M85654	HFBC143	1217	EST02242	M85725	HFBC150	1272	EST02301	M85780	HFBC144
1152	EST02172	M85655	HFBC144	1218	EST02243	M85726	HFBC151	1273	EST02302	M85781	HFBC145
1153	EST02173	M85656	HFBC145	1219	EST02244	M85727	HFBC152	1274	EST02303	M85782	HFBC146
1154	EST02174	M85657	HFBC146	1220	EST02245	M85728	HFBC153	1275	EST02304	M85783	HFBC147
1155	EST02175	M85658	HFBC147	1221	EST02246	M85729	HFBC154	1276	EST02305	M85784	HFBC148
1156	EST02176	M85659	HFBC148	1222	EST02247	M85730	HFBC155	1277	EST02306	M85785	HFBC149
1157	EST02177	M85660	HFBC149	1223	EST02248	M85731	HFBC156	1278	EST02307	M85786	HFBC150
1158	EST02178	M85661	HFBC150	1224	EST02249	M85732	HFBC157	1279	EST02308	M85787	HFBC151
1159	EST02179	M85662	HFBC151	1225	EST02250	M85733	HFBC158	1280	EST02309	M85788	HFBC152
1160	EST02180	M85663	HFBC152	1226	EST02251	M85734	HFBC159	1281	EST02310	M85789	HFBC153
1161	EST02181	M85664	HFBC153	1227	EST02252	M85735	HFBC160	1282	EST02311	M85790	HFBC154
1162	EST02182	M85665	HFBC154	1228	EST02253	M85736	HFBC161	1283	EST02312	M85791	HFBC155
1163	EST02183	M85666	HFBC155	1229	EST02254	M85737	HFBC162	1284	EST02313	M85792	HFBC156
1164	EST02184	M85667	HFBC156	1230	EST02255	M85738	HFBC163	1285	EST02314	M85793	HFBC157
1165	EST02185	M85668	HFBC157	1231	EST02256	M85739	HFBC164	1286	EST02315	M85794	HFBC158
1166	EST02186	M85669	HFBC158	1232	EST02257	M85740	HFBC165	1287	EST02316	M85795	HFBC159
1167	EST02187	M85670	HFBC159	1233	EST02258	M85741	HFBC166	1288	EST02317	M85796	HFBC160
1168	EST02188	M85671	HFBC160	1234	EST02259	M85742	HFBC167	1289	EST02318	M85797	HFBC161
1169	EST02189	M85672	HFBC161	1235	EST02260	M85743	HFBC168	1290	EST02319	M85798	HFBC162
1170	EST02190	M85673	HFBC162	1236	EST02261	M85744	HFBC169	1291	EST02320	M85799	HFBC163
1171	EST02191	M85674	HFBC163	1237	EST02262	M85745	HFBC170	1292	EST02321	M85800	HFBC164
1172	EST02192	M85675	HFBC164	1238	EST02263	M85746	HFBC171	1293	EST02322	M85801	HFBC165
1173	EST02193	M85676	HFBC165	1239	EST02264	M85747	HFBC172	1294	EST02323	M85802	HFBC166
1174	EST02194	M85677	HFBC166	1240	EST02265	M85748	HFBC173	1295	EST02324	M85803	HFBC167
1175	EST02195	M85678	HFBC167	1241	EST02266	M85749	HFBC174	1296	EST02325	M85804	HFBC168
1176	EST02196	M85679	HFBC168	1242	EST02267	M85750	HFBC175	1297	EST02326	M85805	HFBC169
1177	EST02197	M85680	HFBC169	1243	EST02268	M85751	HFBC176	1298	EST02327	M85806	HFBC170
1178	EST02198	M85681	HFBC170	1244	EST02269	M85752	HFBC177	1299	EST02328	M85807	HFBC171
1179	EST02199	M85682	HFBC171	1245	EST02270	M85753	HFBC178	1300	EST02329	M85808	HFBC172
1180	EST02200	M85683	HFBC172	1246	EST02271	M85754	HFBC179	1301	EST02330	M85809	HFBC173
1181	EST02201	M85684	HFBC173	1247	EST02272	M85755	HFBC180	1302	EST02331	M85810	HFBC174
1182	EST02202	M85685	HFBC174	1248	EST02273	M85756	HFBC181	1303	EST02332	M85811	HFBC175
1183	EST02203	M85686	HFBC175	1249	EST02274	M85757	HFBC182	1304	EST02333	M85812	HFBC176
1184	EST02204	M85687	HFBC176	1250	EST02275	M85758	HFBC183	1305	EST02334	M85813	HFBC177
1185	EST02205	M85688	HFBC177	1251	EST02276	M85759	HFBC184	1306	EST02335	M85814	HFBC178
1186	EST02206	M85689	HFBC178		EST02277			1307	EST02336	M85815	HFBC179
1187	EST02207	M85690	HFBC179		EST02278			1308	EST02337	M85816	HFBC180
1188	EST02208	M85691	HFBC180		EST02279			1309	EST02338	M85817	HFBC181
1189	EST02209	M85692	HFBC181		EST02280			1310	EST02339	M85818	HFBC182
1190	EST02210	M85693	HFBC182					1311	EST02340	M85819	HFBC183
1191	EST02211	M85694	HFBC183					1312	EST02341	M85820	HFBC184
1192	EST02212	M85695	HFBC184					1313	EST02342	M85821	HFBC185
1193	EST02213	M85696	HFBC185							M855310	HFBC037
1194	EST02214	M85697	HFBC186								
1195	EST02215	M85698	HFBC187								
1196	EST02216	M85699	HFBC188								
1197	EST02217	M85700	HFBC189								
1198	EST02218	M85701	HFBC190								
1199	EST02219	M85702	HFBC191								
1200	EST02220	M85703	HFBC192								

SUBSTITUTE SHIP

-104-

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
1314	EST02344	M85822	HFBC038	1380	EST02411	M85887	HFBCP19	1479	EST02482	M85958	HFBCY07	1480	EST02518	M85992	HFBCY02	1481	EST02519	M85994	HFBCY04
1315	EST02345	M85823	HFBC038	1381	EST02413	M85888	HFBCP22	1479	EST02483	M85959	HFBCY08	1480	EST02520	M85995	HFBCY05	1481	EST02521	M85996	HFBCY06
1316	EST02346	M85824	HFBC039	1382	EST02414	M85889	HFBCP23	1479	EST02484	M85960	HFBCY09	1480	EST02522	M85997	HFBCY07	1481	EST02523	M85998	HFBCY08
1317	EST02347	M85825	HFBC039	1383	EST02415	M85890	HFBCP24	1479	EST02485	M85961	HFBCY10	1480	EST02523	M85999	HFBCY09	1481	EST02524	M86000	HFBCY10
1318	EST02348	M85826	HFBC041	1384	EST02416	M85891	HFBCP25	1479	EST02486	M85962	HFBCY11	1480	EST02524	M86001	HFBCY11	1481	EST02525	M86002	HFBCY12
1319	EST02349	M85827	HFBC042	1385	EST02417	M85892	HFBCP26	1479	EST02487	M85963	HFBCY12	1480	EST02525	M86002	HFBCY12	1481	EST02526	M86003	HFBCY13
1320	EST02350	M85828	HFBC043	1386	EST02418	M85893	HFBCP27	1479	EST02488	M85964	HFBCY13	1480	EST02526	M86003	HFBCY13	1481	EST02527	M86004	HFBCY14
1321	EST02351	M85829	HFBC044	1387	EST02419	M85894	HFBCP28	1479	EST02489	M85965	HFBCY14	1480	EST02527	M86004	HFBCY14	1481	EST02528	M86005	HFBCY15
1322	EST02352	M85830	HFBC045	1388	EST02420	M85895	HFBCP29	1479	EST02490	M85966	HFBCY15	1480	EST02528	M86005	HFBCY15	1481	EST02529	M86006	HFBCY16
1323	EST02353	M85831	HFBC046	1389	EST02421	M85896	HFBCP30	1479	EST02491	M85967	HFBCY16	1480	EST02529	M86006	HFBCY16	1481	EST02530	M86007	HFBCY17
1324	EST02354	M85832	HFBC047	1390	EST02422	M85897	HFBCP31	1479	EST02492	M85968	HFBCY17	1480	EST02530	M86007	HFBCY17	1481	EST02531	M86008	HFBCY18
1325	EST02355	M85833	HFBC048	1391	EST02423	M85898	HFBCP32	1479	EST02493	M85969	HFBCY18	1480	EST02531	M86008	HFBCY18	1481	EST02532	M86009	HFBCY19
1326	EST02356	M85834	HFBC049	1392	EST02424	M85899	HFBCP33	1479	EST02494	M85970	HFBCY19	1480	EST02532	M86009	HFBCY19	1481	EST02533	M86010	HFBCY20
1327	EST02357	M85835	HFBC050	1393	EST02425	M85900	HFBCP34	1479	EST02495	M85971	HFBCY20	1480	EST02533	M86010	HFBCY20	1481	EST02534	M86011	HFBCY21
1328	EST02358	M85836	HFBC051	1394	EST02426	M85901	HFBCP35	1479	EST02496	M85972	HFBCY21	1480	EST02534	M86011	HFBCY21	1481	EST02535	M86012	HFBCY22
1329	EST02359	M85837	HFBC052	1395	EST02427	M85902	HFBCP36	1479	EST02497	M85973	HFBCY22	1480	EST02535	M86012	HFBCY22	1481	EST02536	M86013	HFBCY23
1330	EST02360	M85838	HFBC053	1396	EST02428	M85903	HFBCP37	1479	EST02498	M85974	HFBCY23	1480	EST02536	M86013	HFBCY23	1481	EST02537	M86014	HFBCY24
1331	EST02361	M85839	HFBC054	1397	EST02429	M85904	HFBCP38	1479	EST02499	M85975	HFBCY24	1480	EST02537	M86014	HFBCY24	1481	EST02538	M86015	HFBCY25
1332	EST02362	M85840	HFBC055	1398	EST02430	M85905	HFBCP39	1479	EST02500	M85976	HFBCY25	1480	EST02538	M86015	HFBCY25	1481	EST02539	M86016	HFBCY26
1333	EST02363	M85841	HFBC056	1399	EST02431	M85906	HFBCP40	1479	EST02501	M85977	HFBCY26	1480	EST02539	M86016	HFBCY26	1481	EST02540	M86017	HFBCY27
1334	EST02364	M85842	HFBC057	1400	EST02432	M85907	HFBCP41	1479	EST02502	M85978	HFBCY27	1480	EST02540	M86017	HFBCY27	1481	EST02541	M86018	HFBCY28
1335	EST02365	M85843	HFBC058	1401	EST02433	M85908	HFBCP42	1479	EST02503	M85979	HFBCY28	1480	EST02541	M86018	HFBCY28	1481	EST02542	M86019	HFBCY29
1336	EST02366	M85844	HFBC059	1402	EST02434	M85909	HFBCP43	1479	EST02504	M85980	HFBCY29	1480	EST02542	M86019	HFBCY29	1481	EST02543	M86020	HFBCY30
1337	EST02367	M85845	HFBC060	1403	EST02435	M85910	HFBCP44	1479	EST02505	M85981	HFBCY30	1480	EST02543	M86020	HFBCY30	1481	EST02544	M86021	HFBCY31
1338	EST02368	M85846	HFBC061	1404	EST02436	M85911	HFBCP45	1479	EST02506	M85982	HFBCY31	1480	EST02544	M86021	HFBCY31	1481	EST02545	M86022	HFBCY32
1339	EST02369	M85847	HFBC062	1405	EST02437	M85912	HFBCP46	1479	EST02507	M85983	HFBCY32	1480	EST02545	M86022	HFBCY32	1481	EST02546	M86023	HFBCY33
1340	EST02370	M85848	HFBC063	1406	EST02438	M85913	HFBCP47	1479	EST02508	M85984	HFBCY33	1480	EST02546	M86023	HFBCY33	1481	EST02547	M86024	HFBCY34
1341	EST02371	M85849	HFBC064	1407	EST02439	M85914	HFBCP48	1479	EST02509	M85985	HFBCY34	1480	EST02547	M86024	HFBCY34	1481	EST02548	M86025	HFBCY35
1342	EST02372	M85850	HFBC065	1408	EST02440	M85915	HFBCP49	1479	EST02510	M85986	HFBCY35	1480	EST02548	M86025	HFBCY35	1481	EST02549	M86026	HFBCY36
1343	EST02373	M85851	HFBC066	1409	EST02441	M85916	HFBCP50	1479	EST02511	M85987	HFBCY36	1480	EST02549	M86026	HFBCY36	1481	EST02550	M86027	HFBCY37
1344	EST02374	M85852	HFBC067	1410	EST02442	M85917	HFBCP51	1479	EST02512	M85988	HFBCY37	1480	EST02550	M86027	HFBCY37	1481	EST02551	M86028	HFBCY38
1345	EST02375	M85853	HFBC068	1411	EST02443	M85918	HFBCP52	1479	EST02513	M85989	HFBCY38	1480	EST02551	M86028	HFBCY38	1481	EST02552	M86029	HFBCY39
1346	EST02376	M85854	HFBC069	1412	EST02444	M85919	HFBCP53	1479	EST02514	M85990	HFBCY39	1480	EST02552	M86029	HFBCY39	1481	EST02553	M86030	HFBCY40
1347	EST02377	M85855	HFBC070	1413	EST02445	M85920	HFBCP54	1479	EST02515	M85991	HFBCY40	1480	EST02553	M86030	HFBCY40	1481	EST02554	M86031	HFBCY41
1348	EST02378	M85856	HFBC071	1414	EST02446	M85921	HFBCP55	1479	EST02516	M85992	HFBCY41	1480	EST02554	M86031	HFBCY41	1481	EST02555	M86032	HFBCY42
1349	EST02379	M85857	HFBC072	1415	EST02447	M85922	HFBCP56	1479	EST02517	M85993	HFBCY42	1480	EST02555	M86032	HFBCY42	1481	EST02556	M86033	HFBCY43
1350	EST02380	M85858	HFBC073	1416	EST02448	M85923	HFBCP57	1479	EST02518	M85994	HFBCY43	1480	EST02556	M86033	HFBCY43	1481	EST02557	M86034	HFBCY44
1351	EST02381	M85859	HFBC074	1417	EST02449	M85924	HFBCP58	1479	EST02519	M85995	HFBCY44	1480	EST02557	M86034	HFBCY44	1481	EST02558	M86035	HFBCY45
1352	EST02382	M85860	HFBC075	1418	EST02450	M85925	HFBCP59	1479	EST02520	M85996	HFBCY45	1480	EST02558	M86035	HFBCY45	1481	EST02559	M86036	HFBCY46
1353	EST02383	M85861	HFBC076	1419	EST02451	M85926	HFBCP60	1479	EST02521	M85997	HFBCY46	1480	EST02559	M86036	HFBCY46	1481	EST02560	M86037	HFBCY47
1354	EST02384	M85862	HFBC077	1420	EST02452	M85927	HFBCP61	1479	EST02522	M85998	HFBCY47	1480	EST02560	M86037	HFBCY47	1481	EST02561	M86038	HFBCY48
1355	EST02385	M85863	HFBC078	1421	EST02453	M85928	HFBCP62	1479	EST02523	M85999	HFBCY48	1480	EST02561	M86038	HFBCY48	1481	EST02562	M86039	HFBCY49
1356	EST02386	M85864	HFBC079	1422	EST02454	M85929	HFBCP63	1479	EST02524	M86000	HFBCY49	1480	EST02562	M86039	HFBCY49	1481	EST02563	M86040	HFBCY50
1357	EST02387	M85865	HFBC080	1423	EST02455	M85930	HFBCP64	1479	EST02525	M86001	HFBCY50	1480	EST02563	M86040	HFBCY50	1481	EST02564	M86041	HFBCY51
1358	EST02388	M85866	HFBC081	1424	EST02456	M85931	HFBCP65	1479	EST02526	M86002	HFBCY51	1480	EST02564	M86041	HFBCY51	1481	EST02565	M86042	HFBCY52
1359	EST02389	M85867	HFBC082	1425	EST02457	M85932	HFBCP66	1479	EST02527	M86003	HFBCY52	1480	EST02565	M86042	HFBCY52	1481	EST02566	M86043	HFBCY53
1360	EST02390	M85868	HFBC083	1426	EST02458	M85933	HFBCP67	1479	EST02528	M86004	HFBCY53	1480	EST02566	M86043	HFBCY53	1481	EST02567	M86044	HFBCY54
1361	EST02391	M85869	HFBC084	1427	EST02459	M85934	HFBCP68	1479	EST02529	M86005	HFBCY54	1480	EST02567	M86044	HFBCY54	1481	EST02568	M86045	HFBCY55
1362	EST02392	M85870	HFBC085	1428	EST02460	M85935	HFBCP69	1479	EST02530	M86006	HFBCY55	1480	EST02568	M86045	HFBCY55	1481	EST02569	M86046	HFBCY56
1363	EST02393	M85871	HFBC086	1429	EST02461	M85936	HFBCP70	1479	EST02531	M86007	HFBCY56	1480	EST02569	M86046	HFBCY56	1481	EST02570	M86047	HFBCY57
1364	EST02394	M85872	HFBC087	1430	EST02462	M85937	HFBCP71	1479	EST02532	M86008	HFBCY57	1480	EST02570	M86047	HFBCY57	1481	EST02571	M86048	HFBCY58
1365	EST02395	M85873	HFBC088	1431	EST02463	M85938	HFBCP72	1479	EST02533	M86009	HFBCY58	1480	EST02571	M86048	HFBCY58	1481	EST02572	M86049	HFBCY59
1366	EST02396	M85874	HFBC089	1432	EST02464	M85939	HFBCP73	1479	EST02534	M86010	HFBCY59	1480	EST02572	M86049	HFBCY59	1481	EST02573	M86050	HFBCY60
1367	EST02397	M85875	HFBC090	1433	EST02465	M85940	HFBCP74	1479	EST02535	M86011	HFBCY60	1480	EST02573	M86050	HFBCY60	1481	EST02574	M86051	HFBCY61
1368	EST02398	M85876	HFBC091	1434	EST02466	M85941	HFBCP75	1479	EST02536	M86012	HFBCY61	1480	EST02574	M86051	HFBCY61	1481	EST02575	M86052	HFBCY62
1369	EST02399	M85877	HFBC092	1435	EST02467	M85942	HFBCP76	1479	EST02537	M86013	HFBCY62	1480	EST02575	M86052	HFBCY62	1481	EST02576	M86053	HFBCY63
1370	EST02400	M85878	HFBC093	1436	EST02468	M85943	HFBCP77	1479	EST02538	M86014	HFBCY63	1480	EST02576	M86053	HFBCY63	1481	EST02577	M86054	HFBCY64
1371	EST02401	M85879	HFBC094	1437	EST02469	M85944	HFBCP78	1479	EST02539	M86015	HFBCY64	1480	EST02577	M86054	HFBCY64	1481	EST02578	M86055	HFBCY65
1372	EST02402	M85880	HFBC095	1438	EST02470	M85945	HFBCP79	1479	EST02540	M86016	HFBCY65	1480	EST02578	M8605					

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
1503	EST02541	M86016	HFBCY28	1635	EST02682	M85316	Clone
1504	EST02542	M86017	HFBCY30	1636	EST02683	M85317	HHCFA6
1505	EST02543	M86018	HFBCY31	1637	EST00796	M78648	HHCFA16
1506	EST02544	M86019	HFBCY32	1638	EST00797	M78649	HHCFA28
1507	EST02545	M86020	HFBCY33	1639	EST00798	M78650	HHCMA26
1508	EST02546	M86021	HFBCY34	1640	EST00799	M78651	HHCMA29
1509	EST02547	M86022	HFBCY35	1641	EST00800	M78652	HHCMA32
1510	EST02548	M86023	HFBCY36	1642	EST00801	M78653	HHCMA34
1511	EST02549	M86024	HFBCY37	1643	EST00802	M78654	HHCMA36
1512	EST02550	M86025	HFBCY38	1644	EST00803	M78655	HHCMA37
1513	EST02551	M86026	HFBCY39	1645	EST01571	M77986	HHCMA40
1514	EST02552	M86027	HFBCY40	1646	EST00804	M78656	HHCMA41
1515	EST02553	M86028	HFBCY41	1647	EST00805	M78657	HHCMA42
1516	EST02554	M86029	HFBCY42	1648	EST00806	M78658	HHCMA43
1517	EST02555	M86030	HFBCY43	1649	EST00807	M78659	HHCMA44
1518	EST02556	M86031	HFBCY44	1650	EST00808	M78660	HHCMA45
1519	EST02557	M86032	HFBCY45	1651	EST00809	M78661	HHCMA46
1520	EST02558	M86033	HFBCY46	1652	EST00810	M78662	HHCMA47
1521	EST02559	M86034	HFBCY47	1653	EST00811	M78663	HHCMA48
1522	EST02560	M86035	HFBCY48	1654	EST00812	M78664	HHCMA49
1523	EST02561	M86036	HFBCY49	1655	EST00813	M78665	HHCMA50
1524	EST02562	M86037	HFBCY50	1656	EST01572	M77987	HHCMA51
1525	EST02563	M86038	HFBCY51	1657	EST00814	M78666	HHCMA52
1526	EST02564	M86039	HFBCY52	1658	EST00815	M78667	HHCMA53
1527	EST02565	M86040	HFBCY53	1659	EST00816	M78668	HHCMA54
1528	EST02566	M86041	HFBCY54	1660	EST00817	M78669	HHCMA55
1529	EST02567	M86042	HFBCY55	1661	EST00818	M78670	HHCMA56
1530	EST02568	M86043	HFBCY56	1662	EST00819	M78671	HHCMA57
1531	EST02569	M86044	HFBCY57	1663	EST00820	M78672	HHCMA58
1532	EST02570	M86045	HFBCY58	1664	EST00821	M78673	HHCMA59
1533	EST02571	M86046	HFBCY59	1665	EST00822	M78674	HHCMA60
1534	EST02572	M86047	HFBCY60	1666	EST00823	M78675	HHCMA61
1535	EST02573	M86048	HFBCY61	1667	EST00824	M78676	HHCMA62
1536	EST02574	M86049	HFBCY62	1668	EST00825	M78677	HHCMA63
1537	EST02575	M86050	HFBCY63	1669	EST00826	M78678	HHCMA64
1538	EST02576	M86051	HFBCY64	1670	EST00827	M78679	HHCMA65
1539	EST02577	M86052	HFBCY65	1671	EST00828	M78680	HHCMA66
1540	EST02578	M86053	HFBCY66	1672	EST00829	M78681	HHCMA67
1541	EST02579	M86054	HFBCY67	1673	EST00830	M78682	HHCMA68
1542	EST02580	M86055	HFBCY68	1674	EST00831	M78683	HHCMA69
1543	EST02581	M86056	HFBCY69	1675	EST00832	M78684	HHCMA70
1544	EST02582	M86057	HFBCY70	1676	EST00833	M78685	HHCMA71
1545	EST02583	M86058	HFBCY71	1677	EST00834	M78686	HHCMA72
1546	EST02584	M86059	HFBCY72	1678	EST00835	M78687	HHCMA73
1547	EST02585	M86060	HFBCY73	1679	EST00836	M78688	HHCMA74
1548	EST02586	M86061	HFBCY74	1680	EST00837	M78689	HHCMA75
1549	EST02587	M86062	HFBCY75	1681	EST00838	M78690	HHCMA76
1550	EST02588	M86063	HFBCY76	1682	EST01573	M77988	HHCMA77
1551	EST02589	M86064	HFBCY77	1683	EST00839	M78691	HHCMA78
1552	EST02590	M86065	HFBCY78	1684	EST00840	M78692	HHCMA79
1553	EST02591	M86066	HFBCY79	1685	EST00841	M78693	HHCMA80
1554	EST02592	M86067	HFBCY80	1686	EST00842	M78694	HHCMA81
1555	EST02593	M86068	HFBCY81	1687	EST01574	M77989	HHCMA82
1556	EST02594	M86069	HFBCY82	1688	EST00843	M78695	HHCMA83
1557	EST02595	M86070	HFBCY83	1689	EST00844	M78696	HHCMA84
1558	EST02596	M86071	HFBCY84	1690	EST00845	M78697	HHCMA85
1559	EST02597	M86072	HFBCY85	1691	EST00846	M78698	HHCMA86
1560	EST02598	M86073	HFBCY86		EST01577	M77992	HHCMA87
1561	EST02599	M86074	HFBCY87				HHCMA88
1562	EST02600	M86075	HFBCY88				HHCMA89
1563	EST02601	M86076	HFBCY89				HHCMA90
1564	EST02602	M86077	HFBCY90				HHCMA91
1565	EST02603	M86078	HFBCY91				HHCMA92
1566	EST02604	M86079	HFBCY92				HHCMA93
1567	EST02605	M86080	HFBCY93				HHCMA94
1568	EST02606	M86081	HFBCY94				HHCMA95
1569	EST02607	M86082	HFBCY95				HHCMA96
1570	EST02608	M86083	HFBCY96				HHCMA97
1571	EST02609	M86084	HFBCY97				HHCMA98
1572	EST02610	M86085	HFBCY98				HHCMA99
1573	EST02611	M86086	HFBCY99				HHCMA100
1574	EST02612	M86087	HFBCY100				
1575	EST02613	M86088	HFBCY101				
1576	EST02614	M86089	HFBCY102				
1577	EST02615	M86090	HFBCY103				
1578	EST02616	M86091	HFBCY104				
1579	EST02617	M86092	HFBCY105				
1580	EST02618	M86093	HFBCY106				
1581	EST02619	M86094	HFBCY107				
1582	EST02620	M86095	HFBCY108				
1583	EST02621	M86096	HFBCY109				
1584	EST02622	M86097	HFBCY110				
1585	EST02623	M86098	HFBCY111				
1586	EST02624	M86099	HFBCY112				
1587	EST02625	M86100	HFBCY113				
1588	EST02626	M86101	HFBCY114				
1589	EST02627	M86102	HFBCY115				
1590	EST02628	M86103	HFBCY116				
1591	EST02629	M86104	HFBCY117				
1592	EST02630	M86105	HFBCY118				
1593	EST02631	M86106	HFBCY119				
1594	EST02632	M86107	HFBCY120				
1595	EST02633	M86108	HFBCY121				
1596	EST02634	M86109	HFBCY122				
1597	EST02635	M86110	HFBCY123				
1598	EST02636	M86111	HFBCY124				
1599	EST02637	M86112	HFBCY125				
1600	EST02638	M86113	HFBCY126				
1601	EST02639	M86114	HFBCY127				
1602	EST02640	M86115	HFBCY128				
1603	EST02641	M86116	HFBCY129				
1604	EST02642	M86117	HFBCY130				
1605	EST02643	M86118	HFBCY131				
1606	EST02644	M86119	HFBCY132				
1607	EST02645	M86120	HFBCY133				
1608	EST02646	M86121	HFBCY134				
1609	EST02647	M86122	HFBCY135				
1610	EST02648	M86123	HFBCY136				
1611	EST02649	M86124	HFBCY137				
1612	EST02650	M86125	HFBCY138				
1613	EST02651	M86126	HFBCY139				
1614	EST02652	M86127	HFBCY140				
1615	EST02653	M86128	HFBCY141				
1616	EST02654	M86129	HFBCY142				
1617	EST02655	M86130	HFBCY143				
1618	EST02656	M86131	HFBCY144				
1619	EST02657	M86132	HFBCY145				
1620	EST02658	M86133	HFBCY146				
1621	EST02659	M86134	HFBCY147				
1622	EST02660	M86135	HFBCY148				
1623	EST02661	M86136	HFBCY149				
1624	EST02662	M86137	HFBCY150				
1625	EST02663	M86138	HFBCY151				
1626	EST02664	M86139	HFBCY152				
1627	EST02665	M86140	HFBCY153				
1628	EST02666	M86141	HFBCY154				
1629	EST02667	M86142	HFBCY155				
1630	EST02668	M86143	HFBCY156				
1631	EST02669	M86144	HFBCY157				
1632	EST02670	M86145	HFBCY158				
1633	EST02671	M86146	HFBCY159				
1634	EST02672	M86147	HFBCY160				
1635	EST02673	M86148	HFBCY161				
1636	EST02674	M86149	HFBCY162				
1637	EST02675	M86150	HFBCY163				
1638	EST02676	M86151	HFBCY164				
1639	EST02677	M86152	HFBCY165				
1640	EST02678	M86153	HFBCY166				
1641	EST02679	M86154	HFBCY167				
1642	EST02680	M86155	HFBCY168				
1643	EST02681	M86156	HFBCY169				
1644	EST02682	M86157	HFBCY170				
1645	EST02683	M86158	HFBCY171				
1646	EST02684	M86159	HFBCY172				
1647	EST02685	M86160	HFBCY173				
1648	EST02686	M86161	HFBCY174				
1649	EST02687	M86162	HFBCY175				
1650	EST02688	M86163	HFBCY176				
1651	EST02689	M86164	HFBCY177				
1652	EST02690	M86165	HFBCY178				
1653	EST02691	M86166	HFBCY179				
1654	EST02692	M86167	HFBCY180				
1655	EST02693	M86168	HFBCY181				
1656	EST02694	M86169	HFBCY182				
1657	EST02695	M86170	HFBCY183				
1658	EST02696	M86171	HFBCY184				
1659	EST02697	M86172	HFBCY185				
1660	EST02698	M86173	HFBCY186				
1661	EST02699	M86174	HFBCY187				
1662	EST02700	M86175	HFBCY188				
1663	EST02701	M86176	HFBCY189				
1664	EST02702	M86177	HFBCY190				
1665	EST02703	M86178	HFBCY191				
1666	EST02704	M86179	HFBCY192				
1667	EST02705	M86180	HFBCY193				
1668	EST02706	M86181	HFBCY194				
1669	EST02707	M86182	HFBCY195				
1670	EST02708	M86183	HFBCY196				
1671	EST02709	M86184	HFBCY197				
1672	EST02710	M86185	HFBCY198				
1673	EST02711	M86186	HFBCY199				
1674	EST02712	M86187	HFBCY200				
1675	EST02713	M86188	HFBCY201				
1676	EST02714	M86189	HFBCY202				
1677	EST02715	M86190	HFBCY203				
167							

-106-

SEQ. ID	EST#	GB#	Cl one	SEQ. ID	EST#	GB#	Cl one	SEQ. ID	EST#	GB#	Cl one	SEQ. ID	EST#	GB#	Cl one
1692	EST00847	M78699	HHCHC42	1758	EST00901	M78753	HHCHC17	1824	EST01617	M78030	HHCHG04	1890	EST01634	M78047	HHCHH42
1693	EST00848	M78700	HHCHC44	1759	EST00902	M78754	HHCHC22	1825	EST00955	M78807	HHCHG07	1891	EST00999	M78850	HHCHH43
1694	EST00849	M78701	HHCHC47	1760	EST00903	M78755	HHCHC23	1826	EST00956	M78808	HHCHG08	1892	EST01630	M78843	HHCHH14
1695	EST00850	M78702	HHCHC52	1761	EST01598	M78012	HHCHC25	1827	EST01619	M78811	HHCHG10	1893	EST00998	M78849	HHCHH25
1696	EST00851	M78703	HHCHC53	1762	EST00905	M78756	HHCHC29	1828	EST00957	M78809	HHCHG11	1894	EST00997	M78851	HHCHH29
1697	EST00852	M78704	HHCHC54	1763	EST00906	M78757	HHCHC30	1829	EST00958	M78810	HHCHG12	1895	EST00996	M78852	HHCHH31
1698	EST00853	M78705	HHCHC55	1764	EST01600	M78014	HHCHC32	1830	EST00959	M78811	HHCHG13	1896	EST00995	M78853	HHCHH33
1699	EST00854	M78706	HHCHC60	1765	EST01601	M78015	HHCHC33	1831	EST00960	M78812	HHCHG16	1897	EST00994	M78854	HHCHH40
1700	EST00855	M78707	HHCHC63	1766	EST00907	M78758	HHCHC37	1832	EST00961	M78813	HHCHG17	1898	EST00993	M78855	HHCHH42
1701	EST00856	M78708	HHCHC70	1767	EST00908	M78759	HHCHC38	1833	EST00962	M78814	HHCHG18	1899	EST00992	M78856	HHCHH44
1702	EST00857	M78709	HHCHC71	1768	EST00909	M78760	HHCHC39	1834	EST00963	M78815	HHCHG21	1900	EST00991	M78857	HHCHH46
1703	EST00858	M78710	HHCHC72	1769	EST00910	M78761	HHCHC40	1835	EST00964	M78816	HHCHG22	1901	EST00990	M78858	HHCHH48
1704	EST00859	M78711	HHCHC77	1770	EST00911	M78762	HHCHC41	1836	EST00965	M78817	HHCHG23	1902	EST00989	M78859	HHCHH49
1705	EST00860	M78712	HHCHC82	1771	EST00912	M78763	HHCHC42	1837	EST00966	M78818	HHCHG24	1903	EST00988	M78860	HHCHH51
1706	EST00861	M78713	HHCHC85	1772	EST00913	M78764	HHCHC43	1838	EST00967	M78819	HHCHG25	1904	EST00987	M78861	HHCHH53
1707	EST00862	M78714	HHCHC87	1773	EST00914	M78765	HHCHC44	1839	EST00968	M78820	HHCHG27	1905	EST00986	M78862	HHCHH54
1708	EST00863	M78715	HHCHC88	1774	EST00915	M78766	HHCHC45	1840	EST00969	M78821	HHCHG28	1906	EST00985	M78863	HHCHH56
1709	EST00864	M78716	HHCHC90	1775	EST00916	M78767	HHCHC46	1841	EST00970	M78822	HHCHG30	1907	EST00984	M78864	HHCHH57
1710	EST00865	M78717	HHCHC92	1776	EST00917	M78768	HHCHC47	1842	EST00971	M78823	HHCHG31	1908	EST00983	M78865	HHCHH59
1711	EST00866	M78718	HHCHC94	1777	EST00918	M78769	HHCHC48	1843	EST00972	M78824	HHCHG32	1909	EST00982	M78866	HHCHH61
1712	EST00867	M78719	HHCHC96	1778	EST00919	M78770	HHCHC49	1844	EST00973	M78825	HHCHG33	1910	EST00981	M78867	HHCHH62
1713	EST00868	M78720	HHCHC98	1779	EST00920	M78771	HHCHC50	1845	EST00974	M78826	HHCHG34	1911	EST00980	M78868	HHCHH64
1714	EST00869	M78721	HHCHC99	1780	EST00921	M78772	HHCHC51	1846	EST00975	M78827	HHCHG35	1912	EST00979	M78869	HHCHH66
1715	EST00870	M78722	HHCHD01	1781	EST00922	M78773	HHCHC52	1847	EST00976	M78828	HHCHG36	1913	EST00978	M78870	HHCHH68
1716	EST00871	M78723	HHCHD02	1782	EST00923	M78774	HHCHC53	1848	EST00977	M78829	HHCHG38	1914	EST00977	M78871	HHCHH69
1717	EST00872	M78724	HHCHD03	1783	EST00924	M78775	HHCHC54	1849	EST00978	M78830	HHCHG39	1915	EST00976	M78872	HHCHH71
1718	EST00873	M78725	HHCHD04	1784	EST00925	M78776	HHCHC55	1850	EST00979	M78831	HHCHG40	1916	EST00975	M78873	HHCHH72
1719	EST00874	M78726	HHCHD05	1785	EST00926	M78777	HHCHC56	1851	EST00980	M78832	HHCHG41	1917	EST00974	M78874	HHCHH74
1720	EST00875	M78727	HHCHD06	1786	EST00927	M78778	HHCHC57	1852	EST00981	M78833	HHCHG42	1918	EST00973	M78875	HHCHH76
1721	EST00876	M78728	HHCHD07	1787	EST00928	M78779	HHCHC58	1853	EST00982	M78834	HHCHG43	1919	EST00972	M78876	HHCHH78
1722	EST00877	M78729	HHCHD08	1788	EST00929	M78780	HHCHC59	1854	EST00983	M78835	HHCHG44	1920	EST00971	M78877	HHCHH79
1723	EST00878	M78730	HHCHD09	1789	EST00930	M78781	HHCHC60	1855	EST00984	M78836	HHCHG45	1921	EST00970	M78878	HHCHH81
1724	EST00879	M78731	HHCHD10	1790	EST00931	M78782	HHCHC61	1856	EST00985	M78837	HHCHG46	1922	EST00969	M78879	HHCHH82
1725	EST00880	M78732	HHCHD11	1791	EST00932	M78783	HHCHC62	1857	EST00986	M78838	HHCHG47	1923	EST00968	M78880	HHCHH84
1726	EST00881	M78733	HHCHD12	1792	EST00933	M78784	HHCHC63	1858	EST00987	M78839	HHCHG48	1924	EST00967	M78881	HHCHH86
1727	EST00882	M78734	HHCHD13	1793	EST00934	M78785	HHCHC64	1859	EST00988	M78840	HHCHG49	1925	EST00966	M78882	HHCHH88
1728	EST00883	M78735	HHCHD14	1794	EST00935	M78786	HHCHC65	1860	EST00989	M78841	HHCHG50	1926	EST00965	M78883	HHCHH89
1729	EST00884	M78736	HHCHD15	1795	EST00936	M78787	HHCHC66	1861	EST00990	M78842	HHCHG51	1927	EST00964	M78884	HHCHH91
1730	EST00885	M78737	HHCHD16	1796	EST00937	M78788	HHCHC67	1862	EST00991	M78843	HHCHG52	1928	EST00963	M78885	HHCHH92
1731	EST00886	M78738	HHCHD17	1797	EST00938	M78789	HHCHC68	1863	EST00992	M78844	HHCHG53	1929	EST00962	M78886	HHCHH94
1732	EST00887	M78739	HHCHD18	1798	EST00939	M78790	HHCHC69	1864	EST00993	M78845	HHCHG54	1930	EST00961	M78887	HHCHH96
1733	EST00888	M78740	HHCHD19	1799	EST00940	M78791	HHCHC70	1865	EST00994	M78846	HHCHG55	1931	EST00960	M78888	HHCHH98
1734	EST00889	M78741	HHCHD20	1800	EST00941	M78792	HHCHC71	1866	EST00995	M78847	HHCHG56	1932	EST00959	M78889	HHCHH99
1735	EST00890	M78742	HHCHD21	1801	EST00942	M78793	HHCHC72	1867	EST00996	M78848	HHCHG57	1933	EST00958	M78890	HHCHH101
1736	EST00891	M78743	HHCHD22	1802	EST00943	M78794	HHCHC73	1868	EST00997	M78849	HHCHG58	1934	EST00957	M78891	HHCHH102
1737	EST00892	M78744	HHCHD23	1803	EST00944	M78795	HHCHC74	1869	EST00998	M78850	HHCHG59	1935	EST00956	M78892	HHCHH104
1738	EST00893	M78745	HHCHD24	1804	EST00945	M78796	HHCHC75	1870	EST00999	M78851	HHCHG60	1936	EST00955	M78893	HHCHH106
1739	EST00894	M78746	HHCHD25	1805	EST00946	M78797	HHCHC76	1871	EST01000	M78852	HHCHG61	1937	EST00954	M78894	HHCHH108
1740	EST00895	M78747	HHCHD26	1806	EST00947	M78798	HHCHC77	1872	EST01001	M78853	HHCHG62	1938	EST00953	M78895	HHCHH110
1741	EST00896	M78748	HHCHD27	1807	EST00948	M78799	HHCHC78	1873	EST01002	M78854	HHCHG63	1939	EST00952	M78896	HHCHH112
1742	EST00897	M78749	HHCHD28	1808	EST00949	M78800	HHCHC79	1874	EST01003	M78855	HHCHG64	1940	EST00951	M78897	HHCHH114
1743	EST00898	M78750	HHCHD29	1809	EST00950	M78801	HHCHC80	1875	EST01004	M78856	HHCHG65	1941	EST00950	M78898	HHCHH116
1744	EST00899	M78751	HHCHD30	1810	EST00951	M78802	HHCHC81	1876	EST01005	M78857	HHCHG66	1942	EST00949	M78899	HHCHH118
1745	EST00900	M78752	HHCHD31	1811	EST00952	M78803	HHCHC82	1877	EST01006	M78858	HHCHG67	1943	EST00948	M78900	HHCHH120
1746	EST00901	M78753	HHCHD32	1812	EST00953	M78804	HHCHC83	1878	EST01007	M78859	HHCHG68	1944	EST00947	M78901	HHCHH122
1747	EST00902	M78754	HHCHD33	1813	EST00954	M78805	HHCHC84	1879	EST01008	M78860	HHCHG69	1945	EST00946	M78902	HHCHH124
1748	EST00903	M78755	HHCHD34	1814	EST00955	M78806	HHCHC85	1880	EST01009	M78861	HHCHG70	1946	EST00945	M78903	HHCHH126
1749	EST00904	M78756	HHCHD35	1815	EST00956	M78807	HHCHC86	1881	EST01010	M78862	HHCHG71	1947	EST00944	M78904	HHCHH128
1750	EST00905	M78757	HHCHD36	1816	EST00957	M78808	HHCHC87	1882	EST01011	M78863	HHCHG72	1948	EST00943	M78905	HHCHH130
1751	EST00906	M78758	HHCHD37	1817	EST00958	M78809	HHCHC88	1883	EST01012	M78864	HHCHG73	1949	EST00942	M78906	HHCHH132
1752	EST00907	M78759	HHCHD38	1818	EST00959	M78810	HHCHC89	1884	EST01013	M78865	HHCHG74	1950	EST00941	M78907	HHCHH134
1753	EST00908	M78760	HHCHD39	1819	EST00960	M78811	HHCHC90	1885	EST01014	M78866	HHCHG75	1951	EST00940	M78908	HHCHH136
1754	EST00909	M78761	HHCHD40	1820	EST00961	M78812	HHCHC91	1886	EST01015	M78867	HHCHG76	1952	EST00939	M78909	HHCHH138
1755	EST00910	M78762	HHCHD41	1821	EST00962	M78813	HHCHC92	1887	EST01016	M78868	HHCHG77	1953	EST00938	M78910	HHCHH140
1756	EST00911	M78763	HHCHD42	1822	EST00963	M78814	HHCHC93	1888	EST01017	M78869	HHCHG78	1954	EST00937	M78911	HHCHH142
1757	EST00912	M78764	HHCHD43	1823	EST00964	M78815	HHCHC94	1889	EST01018	M78870	HHCHG79	1955	EST00936	M78912	HHCHH144

SUBSTITUTE SHEET

-107-

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
1881	EST01000	M78832	HHCNH48	1947	EST01052	M78904	HHCPC05	2013	EST01107	M78959	CLONE	2069	EST01150	M79002	HHCNH19
1882	EST01001	M78831	HHCNH53	1948	EST01053	M78905	HHCPC05	2014	EST01108	M78960	HHCPE80	2068	EST01149	M79001	HHCNH18
1883	EST01002	M78833	HHCNH54	1949	EST01054	M78906	HHCPC08	2015	EST01109	M78961	HHCPE81	2067	EST01148	M79000	HHCNH17
1884	EST01003	M78834	HHCNH55	1950	EST01055	M78907	HHCPC08	2016	EST01110	M78962	HHCPE83	2066	EST01147	M78999	HHCNH16
1885	EST01004	M78835	HHCNH56	1951	EST01056	M78908	HHCPC10	2017	EST01111	M78963	HHCPE85	2065	EST01146	M78998	HHCNH15
1886	EST01005	M78836	HHCNH57	1952	EST01057	M78909	HHCPC11	2018	EST01112	M78964	HHCPE89	2064	EST01145	M78997	HHCNH14
1887	EST01006	M78837	HHCNH72	1953	EST01058	M78910	HHCPC11	2019	EST01113	M78965	HHCPE94	2063	EST01144	M78996	HHCNH13
1888	EST01007	M78838	HHCNH73	1954	EST01059	M78911	HHCPC14	2020	EST01114	M78966	HHCPE96	2062	EST01143	M78995	HHCNH12
1889	EST01008	M78839	HHCNH74	1955	EST01060	M78912	HHCPC14	2021	EST01115	M78967	HHCPE98	2061	EST01142	M78994	HHCNH11
1890	EST01009	M78840	HHCNH75	1956	EST01061	M78913	HHCPC16	2022	EST01116	M78968	HHCPE99	2060	EST01141	M78993	HHCNH10
1891	EST01010	M78841	HHCNH77	1957	EST01062	M78914	HHCPC18	2023	EST01117	M78969	HHCPE99	2059	EST01140	M78992	HHCNH09
1892	EST01011	M78842	HHCNH78	1958	EST01063	M78915	HHCPC18	2024	EST01118	M78970	HHCPE99	2058	EST01139	M78991	HHCNH08
1893	EST01012	M78843	HHCNH79	1959	EST01064	M78916	HHCPC18	2025	EST01119	M78971	HHCPE99	2057	EST01138	M78990	HHCNH07
1894	EST01013	M78844	HHCNH80	1960	EST01065	M78917	HHCPC18	2026	EST01120	M78972	HHCPE99	2056	EST01137	M78989	HHCNH06
1895	EST01014	M78845	HHCNH81	1961	EST01066	M78918	HHCPC18	2027	EST01121	M78973	HHCPE99	2055	EST01136	M78988	HHCNH05
1896	EST01015	M78846	HHCNH82	1962	EST01067	M78919	HHCPC18	2028	EST01122	M78974	HHCPE99	2054	EST01135	M78987	HHCNH04
1897	EST01016	M78847	HHCNH83	1963	EST01068	M78920	HHCPC18	2029	EST01123	M78975	HHCPE99	2053	EST01134	M78986	HHCNH03
1898	EST01017	M78848	HHCNH84	1964	EST01069	M78921	HHCPC18	2030	EST01124	M78976	HHCPE99	2052	EST01133	M78985	HHCNH02
1899	EST01018	M78849	HHCNH85	1965	EST01070	M78922	HHCPC18	2031	EST01125	M78977	HHCPE99	2051	EST01132	M78984	HHCNH01
1900	EST01019	M78850	HHCNH86	1966	EST01071	M78923	HHCPC18	2032	EST01126	M78978	HHCPE99	2050	EST01131	M78983	HHCNH00
1901	EST01020	M78851	HHCNH87	1967	EST01072	M78924	HHCPC18	2033	EST01127	M78979	HHCPE99	2049	EST01130	M78982	HHCNH99
1902	EST01021	M78852	HHCNH88	1968	EST01073	M78925	HHCPC18	2034	EST01128	M78980	HHCPE99	2048	EST01129	M78981	HHCNH98
1903	EST01022	M78853	HHCNH89	1969	EST01074	M78926	HHCPC18	2035	EST01129	M78981	HHCPE99	2047	EST01128	M78980	HHCNH97
1904	EST01023	M78854	HHCNH90	1970	EST01075	M78927	HHCPC18	2036	EST01130	M78982	HHCPE99	2046	EST01127	M78979	HHCNH96
1905	EST01024	M78855	HHCNH91	1971	EST01076	M78928	HHCPC18	2037	EST01131	M78983	HHCPE99	2045	EST01126	M78978	HHCNH95
1906	EST01025	M78856	HHCNH92	1972	EST01077	M78929	HHCPC18	2038	EST01132	M78984	HHCPE99	2044	EST01125	M78977	HHCNH94
1907	EST01026	M78857	HHCNH93	1973	EST01078	M78930	HHCPC18	2039	EST01133	M78985	HHCPE99	2043	EST01124	M78976	HHCNH93
1908	EST01027	M78858	HHCNH94	1974	EST01079	M78931	HHCPC18	2040	EST01134	M78986	HHCPE99	2042	EST01123	M78975	HHCNH92
1909	EST01028	M78859	HHCNH95	1975	EST01080	M78932	HHCPC18	2041	EST01135	M78987	HHCPE99	2041	EST01122	M78974	HHCNH91
1910	EST01029	M78860	HHCNH96	1976	EST01081	M78933	HHCPC18	2042	EST01136	M78988	HHCPE99	2040	EST01121	M78973	HHCNH90
1911	EST01030	M78861	HHCNH97	1977	EST01082	M78934	HHCPC18	2043	EST01137	M78989	HHCPE99	2039	EST01120	M78972	HHCNH89
1912	EST01031	M78862	HHCNH98	1978	EST01083	M78935	HHCPC18	2044	EST01138	M78990	HHCPE99	2038	EST01119	M78971	HHCNH88
1913	EST01032	M78863	HHCNH99	1979	EST01084	M78936	HHCPC18	2045	EST01139	M78991	HHCPE99	2037	EST01118	M78970	HHCNH87
1914	EST01033	M78864	HHCNH00	1980	EST01085	M78937	HHCPC18	2046	EST01140	M78992	HHCPE99	2036	EST01117	M78969	HHCNH86
1915	EST01034	M78865	HHCNH01	1981	EST01086	M78938	HHCPC18	2047	EST01141	M78993	HHCPE99	2035	EST01116	M78968	HHCNH85
1916	EST01035	M78866	HHCNH02	1982	EST01087	M78939	HHCPC18	2048	EST01142	M78994	HHCPE99	2034	EST01115	M78967	HHCNH84
1917	EST01036	M78867	HHCNH03	1983	EST01088	M78940	HHCPC18	2049	EST01143	M78995	HHCPE99	2033	EST01114	M78966	HHCNH83
1918	EST01037	M78868	HHCNH04	1984	EST01089	M78941	HHCPC18	2050	EST01144	M78996	HHCPE99	2032	EST01113	M78965	HHCNH82
1919	EST01038	M78869	HHCNH05	1985	EST01090	M78942	HHCPC18	2051	EST01145	M78997	HHCPE99	2031	EST01112	M78964	HHCNH81
1920	EST01039	M78870	HHCNH06	1986	EST01091	M78943	HHCPC18	2052	EST01146	M78998	HHCPE99	2030	EST01111	M78963	HHCNH80
1921	EST01040	M78871	HHCNH07	1987	EST01092	M78944	HHCPC18	2053	EST01147	M78999	HHCPE99	2029	EST01110	M78962	HHCNH79
1922	EST01041	M78872	HHCNH08	1988	EST01093	M78945	HHCPC18	2054	EST01148	M79000	HHCPE99	2028	EST01109	M78961	HHCNH78
1923	EST01042	M78873	HHCNH09	1989	EST01094	M78946	HHCPC18	2055	EST01149	M79001	HHCPE99	2027	EST01108	M78960	HHCNH77
1924	EST01043	M78874	HHCNH10	1990	EST01095	M78947	HHCPC18	2056	EST01150	M79002	HHCPE99	2026	EST01107	M78959	HHCNH76
1925	EST01044	M78875	HHCNH11	1991	EST01096	M78948	HHCPC18	2057	EST01151	M79003	HHCPE99	2025	EST01106	M78958	HHCNH75
1926	EST01045	M78876	HHCNH12	1992	EST01097	M78949	HHCPC18	2058	EST01152	M79004	HHCPE99	2024	EST01105	M78957	HHCNH74
1927	EST01046	M78877	HHCNH13	1993	EST01098	M78950	HHCPC18	2059	EST01153	M79005	HHCPE99	2023	EST01104	M78956	HHCNH73
1928	EST01047	M78878	HHCNH14	1994	EST01099	M78951	HHCPC18	2060	EST01154	M79006	HHCPE99	2022	EST01103	M78955	HHCNH72
1929	EST01048	M78879	HHCNH15	1995	EST01100	M78952	HHCPC18	2061	EST01155	M79007	HHCPE99	2021	EST01102	M78954	HHCNH71
1930	EST01049	M78880	HHCNH16	1996	EST01101	M78953	HHCPC18	2062	EST01156	M79008	HHCPE99	2020	EST01101	M78953	HHCNH70
1931	EST01050	M78881	HHCNH17	1997	EST01102	M78954	HHCPC18	2063	EST01157	M79009	HHCPE99	2019	EST01100	M78952	HHCNH69
1932	EST01051	M78882	HHCNH18	1998	EST01103	M78955	HHCPC18	2064	EST01158	M79010	HHCPE99	2018	EST01099	M78951	HHCNH68
1933	EST01052	M78883	HHCNH19	1999	EST01104	M78956	HHCPC18	2065	EST01159	M79011	HHCPE99	2017	EST01098	M78950	HHCNH67
1934	EST01053	M78884	HHCNH20	2000	EST01105	M78957	HHCPC18	2066	EST01160	M79012	HHCPE99	2016	EST01097	M78949	HHCNH66
1935	EST01054	M78885	HHCNH21	2001	EST01106	M78958	HHCPC18	2067	EST01161	M79013	HHCPE99	2015	EST01096	M78948	HHCNH65
1936	EST01055	M78886	HHCNH22	2002	EST01107	M78959	HHCPC18	2068	EST01162	M79014	HHCPE99	2014	EST01095	M78947	HHCNH64
1937	EST01056	M78887	HHCNH23	2003	EST01108	M78960	HHCPC18	2069	EST01163	M79015	HHCPE99	2013	EST01094	M78946	HHCNH63
1938	EST01057	M78888	HHCNH24	2004	EST01109	M78961	HHCPC18	2070	EST01164	M79016	HHCPE99	2012	EST01093	M78945	HHCNH62
1939	EST01058	M78889	HHCNH25	2005	EST01110	M78962	HHCPC18	2071	EST01165	M79017	HHCPE99	2071	EST01092	M78944	HHCNH61
1940	EST01059	M78890	HHCNH26	2006	EST01111	M78963	HHCPC18	2072	EST01166	M79018	HHCPE99	2072	EST01091	M78943	HHCNH60
1941	EST01060	M78891	HHCNH27	2007	EST01112	M78964	HHCPC18	2073	EST01167	M79019	HHCPE99	2073	EST01090	M78942	HHCNH59
1942	EST01061	M78892	HHCNH28	2008	EST01113	M78965	HHCPC18	2074	EST01168	M79020	HHCPE99	2074	EST01089	M78941	HHCNH58
1943	EST01062	M78893	HHCNH29	2009	EST01114	M78966	HHCPC18	2075	EST01169	M79021	HHCPE99	2075	EST01088	M78940	HHCNH57
1944	EST01063	M78894	HHCNH30	2010	EST01115	M78967	HHCPC18	2076	EST01170	M79022	HHCPE99	2076	EST01087	M78939	HHCNH56
1945	EST01064	M78895	HHCNH31	2011	EST01116	M78968	HHCPC18	2077	EST01171	M79023	HHCPE99	2077	EST01086	M78938	HHCNH55
1946	EST01065	M78896	HHCNH32	2012	EST01117	M78969	HHCPC18	2078	EST01172	M79024	HHCPE99	2078	EST01085	M78937	HHCNH54

SUBSTITUTE SHEET

-108-

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
2070	EST01151	M79003	HHCPI151	2336	EST01210	M79062	HHCPI133	2302	EST01732	M78141	HHCPI163
2071	EST01152	M79004	HHCPI152	2337	EST01211	M79063	HHCPI134	2303	EST01284	M79116	HHCPI165
2072	EST01153	M79005	HHCPI153	2338	EST01212	M79064	HHCPI135	2304	EST01285	M79117	HHCPI167
2073	EST01154	M79006	HHCPI154	2339	EST01213	M79065	HHCPI136	2305	EST01286	M79118	HHCPI168
2074	EST01155	M79007	HHCPI155	2340	EST01214	M79066	HHCPI137	2306	EST01287	M79119	HHCPI169
2075	EST01156	M79008	HHCPI156	2341	EST01215	M79067	HHCPI138	2307	EST01288		
2076	EST01157	M79009	HHCPI157	2342	EST01216	M79068	HHCPI139	2308	EST01289		
2077	EST01158	M79010	HHCPI158	2343	EST01217	M79069	HHCPI140	2309	EST01290		
2078	EST01159	M79011	HHCPI159	2344	EST01218	M79070	HHCPI141	2310	EST01291		
2079	EST01160	M79012	HHCPI160	2345	EST01219	M79071	HHCPI142	2311	EST01292		
2080	EST01161	M79013	HHCPI161	2346	EST01220	M79072	HHCPI143	2312	EST01293		
2081	EST01162	M79014	HHCPI162	2347	EST01221	M79073	HHCPI144	2313	EST01294		
2082	EST01163	M79015	HHCPI163	2348	EST01222	M79074	HHCPI145	2314	EST01295		
2083	EST01164	M79016	HHCPI164	2349	EST01223	M79075	HHCPI146	2315	EST01296		
2084	EST01165	M79017	HHCPI165	2350	EST01224	M79076	HHCPI147	2316	EST01297		
2085	EST01166	M79018	HHCPI166	2351	EST01225	M79077	HHCPI148	2317	EST01298		
2086	EST01167	M79019	HHCPI167	2352	EST01226	M79078	HHCPI149	2318	EST01299		
2087	EST01168	M79020	HHCPI168	2353	EST01227	M79079	HHCPI150	2319	EST01300		
2088	EST01169	M79021	HHCPI169	2354	EST01228	M79080	HHCPI151	2320	EST01301		
2089	EST01170	M79022	HHCPI170	2355	EST01229	M79081	HHCPI152	2321	EST01302		
2090	EST01171	M79023	HHCPI171	2356	EST01230	M79082	HHCPI153	2322	EST01303		
2091	EST01172	M79024	HHCPI172	2357	EST01231	M79083	HHCPI154	2323	EST01304		
2092	EST01173	M79025	HHCPI173	2358	EST01232	M79084	HHCPI155	2324	EST01305		
2093	EST01174	M79026	HHCPI174	2359	EST01233	M79085	HHCPI156	2325	EST01306		
2094	EST01175	M79027	HHCPI175	2360	EST01234	M79086	HHCPI157	2326	EST01307		
2095	EST01176	M79028	HHCPI176	2361	EST01235	M79087	HHCPI158	2327	EST01308		
2096	EST01177	M79029	HHCPI177	2362	EST01236	M79088	HHCPI159	2328	EST01309		
2097	EST01178	M79030	HHCPI178	2363	EST01237	M79089	HHCPI160	2329	EST01310		
2098	EST01179	M79031	HHCPI179	2364	EST01238	M79090	HHCPI161	2330	EST01311		
2099	EST01180	M79032	HHCPI180	2365	EST01239	M79091	HHCPI162	2331	EST01312		
2100	EST01181	M79033	HHCPI181	2366	EST01240	M79092	HHCPI163	2332	EST01313		
2101	EST01182	M79034	HHCPI182	2367	EST01241	M79093	HHCPI164	2333	EST01314		
2102	EST01183	M79035	HHCPI183	2368	EST01242	M79094	HHCPI165	2334	EST01315		
2103	EST01184	M79036	HHCPI184	2369	EST01243	M79095	HHCPI166	2335	EST01316		
2104	EST01185	M79037	HHCPI185	2370	EST01244	M79096	HHCPI167	2336	EST01317		
2105	EST01186	M79038	HHCPI186	2371	EST01245	M79097	HHCPI168	2337	EST01318		
2106	EST01187	M79039	HHCPI187	2372	EST01246	M79098	HHCPI169	2338	EST01319		
2107	EST01188	M79040	HHCPI188	2373	EST01247	M79099	HHCPI170	2339	EST01320		
2108	EST01189	M79041	HHCPI189	2374	EST01248	M79100	HHCPI171	2340	EST01321		
2109	EST01190	M79042	HHCPI190	2375	EST01249	M79101	HHCPI172	2341	EST01322		
2110	EST01191	M79043	HHCPI191	2376	EST01250	M79102	HHCPI173	2342	EST01323		
2111	EST01192	M79044	HHCPI192	2377	EST01251	M79103	HHCPI174	2343	EST01324		
2112	EST01193	M79045	HHCPI193	2378	EST01252	M79104	HHCPI175	2344	EST01325		
2113	EST01194	M79046	HHCPI194	2379	EST01253	M79105	HHCPI176	2345	EST01326		
2114	EST01195	M79047	HHCPI195	2380	EST01254	M79106	HHCPI177	2346	EST01327		
2115	EST01196	M79048	HHCPI196	2381	EST01255	M79107	HHCPI178	2347	EST01328		
2116	EST01197	M79049	HHCPI197	2382	EST01256	M79108	HHCPI179	2348	EST01329		
2117	EST01198	M79050	HHCPI198	2383	EST01257	M79109	HHCPI180	2349	EST01330		
2118	EST01199	M79051	HHCPI199	2384	EST01258	M79110	HHCPI181	2350	EST01331		
2119	EST01200	M79052	HHCPI200	2385	EST01259	M79111	HHCPI182	2351	EST01332		
2120	EST01201	M79053	HHCPI201	2386	EST01260	M79112	HHCPI183	2352	EST01333		
2121	EST01202	M79054	HHCPI202	2387	EST01261	M79113	HHCPI184	2353	EST01334		
2122	EST01203	M79055	HHCPI203	2388	EST01262	M79114	HHCPI185	2354	EST01335		
2123	EST01204	M79056	HHCPI204	2389	EST01263	M79115	HHCPI186	2355	EST01336		
2124	EST01205	M79057	HHCPI205	2390	EST01264			2356	EST01337		
2125	EST01206	M79058	HHCPI206	2391	EST01265			2357	EST01338		
2126	EST01207	M79059	HHCPI207	2392	EST01266			2358	EST01339		
2127	EST01208	M79060	HHCPI208	2393	EST01267						
2128	EST01209	M79061	HHCPI209	2394	EST01268						
2129	EST01210			2395	EST01269						
2130	EST01211			2396	EST01270						
2131	EST01212			2397	EST01271						
2132	EST01213			2398	EST01272						
2133	EST01214			2399	EST01273						
2134	EST01215			2400	EST01274						
2135	EST01216			2401	EST01275						

SUBSTITUTE SHEET

-109-

SEQ ID	EST#	GB#	Clone	SEQ ID	EST#	GB#	Clone
2259	EST01304	M79156	HICP52	2326	EST01791	M78198	HICP006
2260	EST01305	M79157	HICP51	2327	EST01354	M79207	HICP007
2261	EST01306	M78162	HICP50	2328	EST01355	M79208	HICP008
2262	EST01307	M79158	HICP49	2329	EST01792	M78199	HICP009
2263	EST01308	M79159	HICP48	2330	EST01793	M78200	HICP010
2264	EST01309	M79160	HICP47	2331	EST01356	M79209	HICP011
2265	EST01310	M79161	HICP46	2332	EST01794	M78201	HICP012
2266	EST01311	M79162	HICP45	2333	EST01357	M79210	HICP013
2267	EST01312	M78163	HICP44	2334	EST01358	M79211	HICP014
2268	EST01313	M79164	HICP43	2335	EST01359	M79212	HICP015
2269	EST01314	M79165	HICP42	2336	EST01360	M79213	HICP016
2270	EST01315	M79166	HICP41	2337	EST01361	M79214	HICP017
2271	EST01316	M78167	HICP40	2338	EST02706	M86174	HICP018
2272	EST01317	M79168	HICP39	2339	EST01362	M79215	HICP019
2273	EST01318	M79169	HICP38	2340	EST01363	M78209	HICP020
2274	EST02704	M86172	HICP37	2341	EST01802	M79216	HICP021
2275	EST01319	M79170	HICP36	2342	EST01364	M79217	HICP022
2276	EST01320	M79171	HICP35	2343	EST01365	M79218	HICP023
2277	EST01321	M79172	HICP34	2344	EST01366	M79219	HICP024
2278	EST01322	M79173	HICP33	2345	EST01367	M79220	HICP025
2279	EST01323	M79174	HICP32	2346	EST01368	M79221	HICP026
2280	EST01324	M79175	HICP31	2347	EST01369	M79222	HICP027
2281	EST01325	M79176	HICP30	2348	EST01370	M79223	HICP028
2282	EST01326	M79177	HICP29	2349	EST01371	M79224	HICP029
2283	EST01327	M79178	HICP28	2350	EST02708	M86176	HICP030
2284	EST01328	M79179	HICP27	2351	EST01372	M79225	HICP031
2285	EST01329	M79180	HICP26	2352	EST01373	M79226	HICP032
2286	EST01330	M79181	HICP25	2353	EST01374	M79227	HICP033
2287	EST01331	M79182	HICP24	2354	EST01806	M79228	HICP034
2288	EST01332	M79183	HICP23	2355	EST01375	M79229	HICP035
2289	EST01333	M79184	HICP22	2356	EST01376	M79230	HICP036
2290	EST01334	M79185	HICP21	2357	EST01377	M79231	HICP037
2291	EST01335	M79186	HICP20	2358	EST01378	M79232	HICP038
2292	EST01336	M79187	HICP19	2359	EST01379	M79233	HICP039
2293	EST01337	M79188	HICP18	2360	EST01380	M79234	HICP040
2294	EST01338	M79189	HICP17	2361	EST01381	M79235	HICP041
2295	EST01339	M86173	HICP16	2362	EST01382	M79236	HICP042
2296	EST01340	M79191	HICP15	2363	EST01383	M79237	HICP043
2297	EST01341	M79192	HICP14	2364	EST01384	M79238	HICP044
2298	EST01342	M79193	HICP13	2365	EST01385	M79239	HICP045
2299	EST01343	M79194	HICP12	2366	EST01386	M79240	HICP046
2300	EST01344	M79195	HICP11	2367	EST01387	M79241	HICP047
2301	EST01345	M79196	HICP10	2368	EST01388	M79242	HICP048
2302	EST01346	M79197	HICP09	2369	EST01389	M79243	HICP049
2303	EST01347	M79198	HICP08	2370	EST01390	M79244	HICP050
2304	EST01348	M79199	HICP07	2371	EST01391	M79245	HICP051
2305	EST01349	M79200	HICP06	2372	EST01392	M79246	HICP052
2306	EST01350	M79201	HICP05	2373	EST01393	M79247	HICP053
2307	EST01351	M79202	HICP04	2374	EST01394	M79248	HICP054
2308	EST01352	M79203	HICP03	2375	EST01395	M79249	HICP055
2309	EST01353	M79204	HICP02	2376	EST01396	M79250	HICP056
2310	EST01354	M79205	HICP01	2377	EST01397	M79251	HICP057
2311	EST01355	M79206	HICP00	2378	EST01398	M79252	HICP058
2312	EST01356	M79207	HICP99	2379	EST01399	M79253	HICP059
2313	EST01357	M79208	HICP98	2380	EST01400	M79254	HICP060
2314	EST01358	M79209	HICP97	2381	EST01401	M79255	HICP061
2315	EST01359	M79210	HICP96	2382	EST01402	M79256	HICP062
2316	EST01360	M79211	HICP95	2383	EST01403	M79257	HICP063
2317	EST01361	M79212	HICP94	2384	EST01404	M79258	HICP064
2318	EST01362	M79213	HICP93	2385	EST01405	M79259	HICP065
2319	EST01363	M79214	HICP92	2386	EST01406	M79260	HICP066
2320	EST01364	M79215	HICP91	2387	EST01407		
2321	EST01365	M79216	HICP90	2388	EST02712		
2322	EST01366	M79217	HICP89	2389	EST01408		
2323	EST01367	M79218	HICP88	2390	EST01409		
2324	EST01368	M79219	HICP87	2391	EST01410		
2325	EST01369	M79220	HICP86				

SUBSTITUTE SHEET

-110-

NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

-111-

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Venter, J. Craig
Adams, Mark D.
Moreno, Ruben F.
- (ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene
Transcription Product
- (iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
 - (B) STREET: 620 Newport Center Dr. Sixteenth Floor
 - (C) CITY: Newport Beach
 - (D) STATE: CA
 - (E) COUNTRY: USA
 - (F) ZIP: 92660
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: 07/837,195
 - (B) FILING DATE: 12-FEB-1992
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 07/716,831
 - (B) FILING DATE: 20-JUN-1991
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Israelsen, Ned A.
 - (B) REGISTRATION NUMBER: 29,655
 - (C) REFERENCE/DOCKET NUMBER: NIH004.004CP1
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 619-235-8550
 - (B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTTT GTTCCCTCA GTGTCCCTTT TAATGCTTC CCTCCATTTT CCTAGCAGC ATCCTAGTTC ATGGTCTGGG
TTATCAGAGG AGCAAAAACA TTTAAGTGTG AAATAATGCT CATGTGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

112

AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTT TCCCATTTTA
GGTCCCCAAA AGTAGGAGGT GGGGCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAG CTGCAGCCAC CATATGGGGC
ACTCCTGGCT GGTGTACAGG GTGGGCATTG CCCAGTCTT TT

SEQ ID NO:2: (Length of Sequence = 214 Nucleotides)

GTITINCITTT TTTCTTAGCT TCATTTCTCT TAAAAACAA GGAACAAGAA AACATTGCAC CAGCGTTCTA AGCCTCAAAC
AAAANACAAA ACAATATCCC CTGCGAAGAA CAATAAATT TACATCTCTT TGGCAACAAT AACTTAAAT CACCCAATT
CCATTGCTC CAACCACAGC AGTTAGTTAG TTACAAAAT ATTCCNTGTG CTGC

SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT
GGTACCCAAA TGGGTGGTTG GATATAAGAG TAACAAAAGG ACTGAAAGG TTAAAAAGA AAGAAAAAA AAAAATCCCC
TGGTTGGGAG GGTGTTAAGT ATCGAGTGT TTTCCAAACC ATTCCTCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG
ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCCT
GATCCCTGTA TTATCAAGGC ACAG

SEQ ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGGTAA CCGAGGCGGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGGCT TCGTGGGAGG
CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCCAACCG GCTCCACTTG GAGATCAGCA GGAGGGCCAG
TGTGGGACCC CTGCTGCCAC CTCTCCTGGG CCGTGTCTCT TCTGTGAAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG
CAATAAGAAA CCTCGTGTGC CAGCTTCTTA AGGGTGCAG TGCAAGACCC CA

SEQ ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCCCTAC ATATATATTC ACAGAAAATC ATATTGCATA TACTCTTTCT CCACATCATA AAAATGGGTG TTGGGCTCTC
TAGGACACAA GGAAGCAGG CCAAATTTCT CATATTTTCA GGAATAAACT GAGTGCCCG AAGGTGTAAT AGGAACCTTT
TACTAACCTC ATCTGACTTC ATCTCACAC CAGCAATTTG TGTGTAAAGG AACTGGCCGA GAGTGGTTAA GAAATATATC
CAAAGACGTA TAGTTCCAAA TGGAAACCGG ATCTTTTAT TTAATTTCCA ATCATCTTTC CATTATATCA GCCAATGATG
GAGCAGAAAG CTGGTCCAGG CAATCCAGA ATAGATCTTT CTAGGCACCC GTTCAGTGTG AGGAGGGGGA AGTGGCCTTG
CCAAGGGGCC AGTGAGCTCA ATTAGGGTGA ACGCTGCTTC TTAGCCTACC CCAGGGGNCA CCGCACTTAG GTTGTTTTGT
GCCCAGCTTT GGCAGGAAGC ATTCTCTCTT TCAAAGATTN NAGCCTTGC GTCATATATC GGGTGTAAATA GGGTCTTTTT
TT

SEQ ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGTTCTC CCTCTTTCAA TTTTAGCAGT AATGTGATCC TCAAAAATGC ATTAACTACTA GTTGAAGTAA ATAAACGGAA
GAGCTCCAAA ATGCTGCAT TAAATGCATT TTTCCACACT AATGCCAATC ATCCAAAGCT ATTTCAACA AGTCAGGTAT
TCAAAGCTAT TCACACCACT TGAAAGAGTA ATTACATTT ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG
CTTCTCATAG GTTATCTCAT GTACATTATG CCACCTTAC TTAATATGAT CACAATTNAG TGCTATAGGT TTTTGGGTTA
ATGTTTTCCC NGGGGGAGTT GTTAAAAACA TGGCATTTT

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

113

AACTTGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTTAG AAATCATTGC TCAAAAGAAR
 AACCTGGCAA TGCATGATTA CGAAATGCAA AAGAMGATAC AGTTGCTCTC TGTATATGCG CTTTCCACAT CCACAGATTC
 AAACAACGTGT GGATAAAAAA GGATTTTTTCA ATGCCATTAA ACAVCAATGC AACAGTAA

SEQ ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAAACCTA TGTCCCTCCT TTGCTCAGAA ACTTTTAATA TCTKCTATT TCCCCATGTA AAAGCCAATC
 CTCAACCACA GTGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GTCACTGCCC CCAGCCCCAG TACTTGGGGA
 CTTTGCCCTT GCAGTCCCT GTGCCAGCAA ACTCTTCTC CAGATGTCCA CATGACTCAC CCNCTCCTT CAGGGGTCTT
 CTCAAATGTC ACTTTACCAG AGGTGGCTTC CCTGACCATC CTGTATAAAT AGCATCACC TACCTCCTAT CTCCTCTCT
 AATGTCTCAG GAATTGATA TCAAG

SEQ ID NO:9: (Length of Sequence = 189 Nucleotides)

GTGAACAGAC TAAGGCCTTT NTGGAGGCC AGAATAAGAT TACTGTGCCA TTCTTGAGC AGTGTCCCAT CAGAGGTTTA
 TACAAAGAGA GAATGACTGA ACTATATGAT TATCCANGT ATAGTTGCCA CTCAAGAAA GGAGAACGGT GTTTTATTT
 TTACAATACA GENTTTNAGA ACCACCGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCGC CACCTGCTGG ACGCGAGGG CTACTACGAT GCCATGGGTG TCTGRTTTT TTATTTCTCA GACAGGACTG
 CTCTGTAINT GTCTTTGGAT TCTACGTAGA TTTATATTTG TAAATATTA CATTTGTCAT GACCAGAAGA AATGTCATTA
 TCGTAAATTT TAGATTCTGG NGTCTATATA TGAAGNAAT ACTAACTACT AACTGTTATA ACAWCAAAT GTGGGNTGTA
 TATCTACARG CCGAGCCGA CTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGTGATA AAATGGTAG TTTTCATGTTA TCTACAAGRC TAAGKTCAA ATTCCATGCA TGTGCTGRTA
 AAAGACCCAT NATGGKCTM ACTGTACTTA CTCCCATTT ATTAGCATC ATTCTGGTCA CCAGCTCTAG TTCTCTGCT
 TAGCGAATCT CGCTGTCTT CAAGATGTCA TTCAAATGTC ACATTTTGTG GGAAGCCTG CCTTTTTTGA CACGGTCTCC
 CTGCCAC

SEQ ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCCTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA
 AVTTCTGTIV VATVGVGCC ACTCAGCCTG TGGATCTGG CAGCCCTAGC AAACATAC ACACATACAT TTAAACTCG
 GTTAAATCCT GTERCCATTC ACTTATGGTT CAGTTTTTAA ATAGTCCTAG TCTTATGVCC ACTGTTAAAG TTCACCAGGA
 CATAGGSCAT TGGGGAAAGG GGCTGTAC TCTTGGATTA

SEQ ID NO:13: (Length of Sequence = 339 Nucleotides)

VCTVCTVCC AACTTCATTC AGATATTGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC
 CATTTTTVIR ATTGATGACA AATCAGGGAA CATTATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACAGT
 TGATGGCTCA GCGGTGGAC AGGGACACCA ATCGGCCACT GGAGCCACCG TCGGAATTCA TTKTCAAGGK CCAGGACATT
 AATGACAGTC CTCGGAGGT TTCTGCACG AGACCTATCA TGCCAACGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT
 ACGGTAGTGG GGAGGCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

114

GGGVGCAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACCTCTTG GAAAGAACAG GCTACACACT
 TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TTTATYCAGG TCAGCAGCCT TCTGTTGGCA
 CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAAC TGTTCATTA TTTGAGAAAG CTGAGACCTA
 TATGGGATCC TTCGTCTAAT GATGGATCCA CTCACGTGTC TCAATAGAGG TTAATGCGTT TGTCACTTTT TGTACAAAA
 GGAGCARGCT CAAGGAGGGC TG

SEQ ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGTTGATGC TGAAATTVAAG GATCCACCAA TTCCAGAAAA ACCATGGAAG GTTCATGTGA AATGGATTTT GGACACTGAT
 ATTTTCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGTTTYCGTC AGCGGATTTT
 AACCAAGAAT GAAGAGCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCTAA TGCTCGAAAG AGGAAACATT
 CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTACGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG
 AAGCGCAAG AAGTCCAGAA AGAGGGWGG TTGA

SEQ ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGTT TCTTCCAGGA TGAGAAATCA GTGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACAGCGGA
 GCGAGACCAT CTTAAAGAG CCCAGCCAA GCTGACCATG GGTCTGACCC CAACTGAAG AAATGCCAG CCCAGCCAAA
 CCCAAATTGC TAACTGTAT TATAAGCAAG TACAATGGTC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTACAC
 AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCTGTCAGA GGYACCTTVG
 GTTGGCAAAA CTTCAAAAAG AGGGACCT

SEQ ID NO:17: (Length of Sequence = 415 Nucleotides)

AGCAYGGGCT GGGGGGCCGG GAGTATAGGC TGGGGCTTGT TTTAGCTCT GCGCCCAACA CCCCCTCCTC TTCCGTCTG
 ATTAAGCCCA AGGGTTGGTG GACTTAACCT TCAGCCCATC TCTAAGGGTT TCACAGACTG GATCTTTCTA AACTTTATTG
 GGTACCTGCT TCCCCTTTTC CTTGGTAGTT TTCATCTACA AAAAGTCAA ACCTGATCGA AATAGAAATA AGATCATCAA
 ATTGGACCAT TCTCTTAGCG TTCGAGTGTG CCGGCCAGAC TGGCATTGAG TACAGCGTGA GATCCAAACA CATCACACTG
 GCCTCAGGTC ACCAAGTCCG CACTCAGGGC ACAAGGCTG CCGTGTGGT CACAAGGCTT TCCTTAATGT CGTCGGTGCC
 CAGGTGAACC ACAAG

SEQ ID NO:18: (Length of Sequence = 356 Nucleotides)

GTATGATGT CTGTAGGTAT TTCTATACIT AACCATCTGT GTCCCAATTA AGCTAAACAT GATTCATTCT GATGCCAACC
 CCCATCCATC ATGCCATGGA TCGCTCTAGA CTTCTTCCCT TGTAACCTCC CACTCAAACA GTGAGAAACC TTTGCCAGT
 ATGTTTTGGA GTAACCTCAC TGGGAGTTTG CAGTCCACT AGATGAATGC CAACCCATT GTTCATTTAA AAGGACTTTT
 GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGTT ATCTTGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG
 GAAACTCTAG GGGCCACAAG GGTCTGGGT GCTTGC

SEQ ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TTTTITTTAG TTTTAAACCA CCAACCAAT ATTTTYCCIT TAAATTTTAA TCTTATAATA TAGAAATCTT
 ATGTAAATGA AATTTTGTCA TGTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT
 AATTTACAAC TTACATTAGG GGTITGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAACTCTTC AAAATGGGCT
 CTTCTAATGA GGTCACTACT GAACATAATT GTTCCCTCTT CTGTAAATA GAATAGGTTT AAATGACTAG TCCAATGGA
 ATTATTGCTT TCTKGTTAA

115

SEQ ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCCATCAGCT GTTCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC
 TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCIT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA
 TTAATCAGAA ATTTTCAAAG CTGGATTCT AATGATATGC ATTATCATT GACATTCAAA TGCTATACAT CTTCTGATGA
 AGCCTCCTTG ACAGCAGCTA CACTTATTTT ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC
 TTCCCCACTC TCCTCTTGGG GGAATGAAAA GATGTGGCGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGGCTAGGT
 CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEQ ID NO:21: (Length of Sequence = 385 Nucleotides)

GTITGATTG CTTTTTTTTT AGAGTTTAC ATCAGTGTIT TTCAGGAATA TTGGTCTTTC ATTTTCTTTT CTTGGAATAT
 TTTCTAGITT TACTTTGTCA GAGTAAATTC TGGCTTCACA GAATTATTTG TAGTCCTCC TGCTTGTTT TATTCATGCT
 GCTATAACAA AATACCACAG ACAAGGTGGT AATAAATAAC ACAAAATTTT TTTTCCCAGT TCTGGAGGCT AGGAGTTCAA
 GAAGCTGGCA AGTTCAATGT CTGGTGAGAC CCATTCTTTC ATAGGTGGCA CCATCTAGGG GTCCCTACAT GRCAAAGAGA
 TGAAGGGGCC AAAAAGATGG TGACCTATTG TGAGGCTTT TTTAAAGGGC CTTVAAATCC CAGTC

SEQ ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCTTCATGG TCATGAAGGC CATGCAGTCT CTCAGTCCC GAGGCTACGT GAAGGAACAG TTGCTCTGGA GACATTTCTA
 CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCTT GCCACCCTAC
 GCCGTAGCCG TCCAGAGACT GGCAGGCTC GGCCTAAAGG TCTGGGAGGG TGAGCGACCT GCGAGACTCA CAAGAGGGGA
 AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC
 AGCAACCGAA TTCCAGTTTA GAGGCGGATT TVGGTGTGK ACGGTGTGAG CCAC

SEQ ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGTGA TCACCACAGC TCGTTTCTTG CAGTGACACT TAACATACTC AGCATCTTCA TGAATTCIGA ATAAITTTACT
 GATCGTAAAG TCTAAAAGTA TCAATTTTCA GTGAGCAGTT TTAAATCAGA AAATAGTCAA TAGTTAATCA TGACTCTTCA
 GGGTATTTCC TTCAGTCTCT CTGAAGAGTT TCCAGAACA TTCTTGTGAA AAGGAATGCC TCCCAACAAT GGAGAGCAAC
 AATAGCAACA GGCATCTGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGTTTATC TGTTTCTTCC AGTGGAGGAA
 GG

SEQ ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTGGCACAG GCAGCAAGGA GTCCAGTGA ATCTCCACCC
 CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA
 CAGACAGCAG TCTTGATGCC TCGACGGGAC CCCTTGAAGG CTGTGATGA TAGGTTAGAA ATAGCAAACC TGTGAGCATT
 GAAGGAATC TCACCTCCGT GGGCCTGAAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA
 AGAAACACAA TGCCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAAT GAGGCAGAAT ATGTCTTGAA
 GAAAAAANTT GCAAGCCACA CTTCTNGAGA TTTTGTTCAT GATCCATTTT AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEQ ID NO:26: (Length of Sequence = 355 Nucleotides)

116

GATTGGTATA CGGGCAACAA TGGATTGATA GCGTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT
 GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCAGC
 CCACTKCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAATAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAAG
 TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCAAA ATTAGAAAAT GTACAAATTA AATATTAATG ACCCATAACC
 CTATAAGGGA AAGTTTAACC TCTCTAGTAT TTTTT

SEQ ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCTGAA TAATTTACTG
 ATCGTAAAGT CTAAAAGTAT CAATTTTCAGG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG
 GGTATTTTCT TCACGTCTC TGAAGAGTTT CCCAGAACAT TCTTGTAAGG AGGAATGCCT CCCAACAATG GAGGAGCAAC
 AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAAGA GGNCTTTTTT TGCTTTCTTC CAGTGAGGAA
 GG

SEQ ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTTTTTATT AAAGGACCAC CCGTTCCTGC GTGAGATGAA TGGATTCAAA CAGGGCAAGA GTGGATACAG MGAGATAAGT
 TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA
 CTTTACACTT TTTTAGATCA GTCTATTCTT GATGCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT
 ATATTTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGGCAGGG AAGCCTGGAA GCAAGGAGG ACCTGGCTCC TGAATCTCAG AGAGGATAGG CTGGGATCCC TGGGCGAGGC
 CTGTTCTCTG GCTGGCCAAT TTAGTCTTTC AATGTCTTAA GGGCTCTCCA TTGCTGCCC TTGCTCTTT CTAGCCTGTT
 ATTTCTAGGC TCCTCTGAAT AAATCTCAGG TTCTCTACTG TCATGCCTTT AGTTCAAAA TGAGAATCTG CCTACAGTG
 CTGGCCTCTT TCCGGCTGA AAGCCAGCAC CTTKCGACCC GG

SEQ ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTC AAGACACAAC ATGGCACCTG TGTCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT
 AATGGGTGTC CAGATGGGA AGGCAGCTTC TCTGCAACTG AGCTGAGATC TCAAAATAGA CAATGTCAAG ATGGAATGAG
 AAGGGAAAA CAGCATGTGT AGACAGGTAG TGACAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAAGGGAA
 TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA
 AGGACCTGTG TCTGTTAAC CATTT

SEQ ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATTGG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAAATTGAC ACCCCAACT AAGTGTCTA CTTAGCTTCT
 ACAATAGTGA TTCTAGACC TTAGATTAGT CATTACATTT TTATTTAAGG TACTATGTTA CTTTCATGAC TACAAATGA
 GGCACCTGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTTGTCTTT ATGTCTGATT AATGCCAAG ATATTGTGAG
 GGATTATTTT AAAGAAGCCC TTAGTCATGA TGGCTATTTT TAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC
 CTGGTTTGAG GGGCCAAAT AAG

SEQ ID NO:32: (Length of Sequence = 153 Nucleotides)

117

ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC CCCTGAAGGN GGGGGGTGA GTCATGTGGA
CATCTTGAGG AAGAGTTTAC TGGCACAGGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGTCAGCT TATCGCAGGT GCAGCCAAAC ACAAGCTTC AGGACAAATT GTACAACTT TACAATGTGG GATTTAAATT
TAAAATATGA TACATAAAAA TCTACACAAA ACTGATAAAA ATCAAGCACA GNTACCAGGA TTGAACTTA TAATAATCCA
TGIGTGAAAG GGAGTCTTGT TTCTTTTCAA GTGCTTTTAT TCTGCTATGG AACAGTCAAA ATGGAAGNTG TAAAGCTTGG
TGGTTAGTTT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCCACCCA TATCTAATCC AACAAAGTCCA GCTGCCTCTC TCINAAMAAT ACCNARGATC AGGCCCTTC TCAGCACCCC
CACAGCTGCT GCCCCAAGG AAGCCACGTC ATCTCTCAG GAGATTGTC AGCAGCCACT GCCTCTTGT CACCTTCGCC
TGIGTTCATT CTCCCACAT GGCCAGGGAA TGCGTCTGT TAAAGTCTGC TAGGTACGG TCCTTCTAC TCAAAATGCT
CCCTGGCTC CCACTGCCCC CAGAGTAAAA AGCCAGACC TTCAAATGAC ACAAGGCCT ACAACGA

SEQ ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGTC ATCAGATGCC TGCTNGATAA TATATAACA GTAAAAACA CTTTCACTTC TTCTATTNT AATCGTGTGC
CATGGATCTG ATCTGTACCA TGACCTTACA TAAGGCTGGA TGGACCTCAG GCTGAGGSCC CAATGTATGT KTGCTGTGG
GTGTGGTTGG GAGTGTGTCT GCKGAGTAAG AACACGNTTT TCAAGATTCT AAAGCTCAAT TMAAGTGGCA CATTATRAT
AAACTCAGAT CTGNTCAAAA GTCCGG

SEQ ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCTTTGGA AAGACTTTGA CCTCTGAACA AAAAGCCAGA AGGCTGCTTA AAGAAATAGT AAGGGTTTCA CTTGCCCTGG
ATAGTCACAA ATCTAGGAGT ACTGGTTCAC TGCCTTGGGT TACCAGGTAT CAGCTCTTC ACAATCTCTC CTCTTCCCAT
GCTTCCCTT AAAGTCCAGT TGACAAATGA AAAAGAAAAA AAGGCCCTGA TTTATAGTAT TGCCAAACAA CCTCATAAGA
ATGGGTAAAA TTACATACAC ACATACATAG AGAAGGGAGG TAATGCTGTG AATCTACTTG AGCTGGATTG CATGCTCCCT
AGGGACCACG GTGCCCAACC TGTAATTTTA TTTCTAATT TTATAAATAT ACTCCTTTTT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGTCTAC ACAAGGAAGT ACAGGATTG GCTTTTCTAG ATGTCATATC CAAACTTCGC AGTCATGAGA ACAAAGTGT
TGCCCGAGCAG GCCTCTCTCA CAGAGCAGAG ACTTACTGTG GAAAGCTGAG AACTGCCCGA TACACGGCAT CATCCCATCT
CTAATTTCCC CTCGTCTC CATCCAGCGG CTCTTCCGC TTCATTCTT ACCATACCAC TTGTGCATGC ATGTRATGTT
CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTCT AAACCTATAG TTAGTGTGAT CATGACTTTG
GTCAAAGGCA AGTYTCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCAG
AAGCGAATCA CCACACCATA CATGACCAAG TAGAGCGAG CCCGCGTGT GGGCACCCGA GCGCTCCAGA TTGCGATGTG
TGCCCCGTG ATGTTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC CGAAAGATCC
CCATCATCAT TCGCCGTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTGACGAG CTCATCATCA CGACTTGAG
CTGGAGTCAT CTTTCTGMC CTTTCCCCA TGCCC

SEQ ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCTGAACC CGTTTGGGA AATAATGGGA TTCCTTGATC ACGGGACAAC GAATCACCCCT GAAGTTTTC
TCCAGTTTAC TCAGTCACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGCTAA
TACCATGCTA GGCATTACTT GGGAAATTAT GAGTTGGTAT ACATCTGTGA ATTTGGTGGG AGGAGAAAAC TAACACTAA
TTTATCAAAG CCACTGGTAC GTTCAGCGTT ATAAAAATTA CAAGGATCTG CTTCTCGGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTCCGGG GCTAGAGATA CACATGCCAG TNCITACAT TTCTCAGCAC TGTGCTGTG ATTACAGCA GTTCAATTGT
TCATGCGATA TAAGCCAGTC ATGTGGCCCA AGTTATTCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGGCCT
GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TGCCTTTCTT TAGAAATTTA GGGCAGTGTG ATGCTTCCAG AGGTCTGTAC AAACACCAGC TTTCATTGTG CTTGGGAGTT
TCCATGCCCTC TYCCTTCTCT TGCTTAGTG CACGTTTCTG CTTTATTCA GTTTGACTGC CTGAGACTGA KTCCAACAAC
CCAAACTGAA CGCTCAGCTC CTCCKTTTCA AAGGAGGATG ACTTNTCTNA ACAACTATTT AGGTGAATTA TTKCKACAGT
TTATTAAAGC AATGGCTCTA AACAAATTCC ACTGGGGGTG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG
GT

SEQ ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACTTTGGC ATTTTATTTC AGACACGTAT AAAAACAAAA CAAAAACTT CAGTGATACA ACAGACGTTT TCCCTTAGTT
CCCCATCCAA GGGGACAGAG GTGTGCAGCT GAAGCTGGAY CTTTTTCTG TCTACCTGG AAGCTGTCTC ACTGCTGGAT
GAGAATGGCT TCTAAAGTG GATCTTGGGG ATCCTTGTGA ATTTGCCCTC GGATAAGGAG TGAAGWTCAT TTACGGCACA
TGTGGATTAT GGTTACACA AAGATGTCCA GTTATTTT

SEQ ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAAGAGGA AAGTGGAAATC TCTGTGGCCC ATCTTCAGGA
TCCACCACCA GAAAACCCGT TACATCTTCTG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA
TTAAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAAATGG TAAAGCAAG GTTATGTGTA CTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTTC AGGTGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CGGCCATTTT
TGGTGAAGTG CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGA CTTCAACCGG
CCCTKGGTAG CCTACAAGGC GGTGGTTTTG GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGGAGAA AGGKGCATAG
CATCACGGGG GGACCGGAAC AGCCGCTGG CCGTGCAAMC TGCGGGGACT GGGATGGGCA AACCG

SEQ ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCTNNGC CTAATTAAAA GATTCCATTA CATTACTTTT TATCATTTAT ACTGCCAAGG ATCAGTCACA
AAAAATTCAA ATTATACATA TTATTCATGC TTAAATTTC TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTTCA
TAACATAGGG AAAAATTACT GTTTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTGTG
CAAGTTGGKA CAGGTTCAT CGAT

SEQ ID NO:47: (Length of Sequence = 175 Nucleotides)

GATCTCTTCC AGCGTCAATG TACTGGGACA GCAAACACTC ACATTGAAG TTCTTCTGG CCACCGGCTT CCCAGTACAT
TGACGCTGGA AGAGATCATC TCAAATGGTT CTCCAGTGTG AGGCTGGAGA TCTCCAGAAA TGGAGTCTAC TCCTGGGGTG
GCTTGTATGG GAGCC

SEQ ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCTGTGAGA GGNACCGGGC AGCTCAMRCC CACAGCGGCT CCTCATCTC TGTGGTGGCA TCCTCATTC ACTCTCATCT
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTCC TGTTCCTCT GCTGTAACTG CTCCTTTTCC
TTCTGGAGCA CACGCGGGC TGACGCGAGC TGTGTAGCT TCCGCTTACT TMTGACAAAC TGTACCAGGC TAGAATCCTT
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

SEQ ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAACCCC TTGTGGGGGA AAAGGAGTGA GTTTACTTGG TAAAAATA
ATGGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCCGGGAAAA GAGTTGGGGC AGTGAACCTC CCAGGCCGAC
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCCTAC CTMCTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA
CACCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTACCTG GTATTAAAC
TATTTACTGT TAAAAATCT GTGACTTCAT GGARGTGGG

SEQ ID NO:50: (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GAGAGKCTCC AGGATGAAGG
GGAAARAGG CCGCATGCCA GTCACCTGGC ATCTNCCAGA GAGGGYCAGY CTNCCACTG AGACTGGGGC ACGAGTCCCG
TCATCACCAT GCCCTCTGAC TGTGAACTG TCTTTTACC TGACAAATAC TACACAGGTA TCGMTCTGG CCATACCTG
CTATCTAAC CCAGGAAGT ATTAGATTGT T

SEQ ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTTG CAAAGCATTG CATTTTGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGA
CACTGGCAGG ACGCAGCACC CCCCAGCTGG CCTTGGCAG GCTGCACCG GCGCATGCGG GTGTGGGCCA GGGTGTCTTT
AGGAAGCAGG TGGGAGTCTK NCACTGTCAG KCGTCCAGG AGKGYACCAK GCCTGGCAGG GCACTG

SEQ ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGG CAGGGTGCAC ACACACACGT GGGTCTGGC
TGGGTGAGGC AAGCAAAACC TGCTGCACA TGSCAAAGGG ATGTGGGAAG TATCCATGGG CACCAGGGGA AGCTGCAGTT
TGGGAGGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGG CCACCCCACT GGGGGTCTCC AAGTGGTCAA GTTCCGTCTG
CCAGGTAGA AGCTATGATG GGGGCTTCTA GGACACTNGA GGCTGACCTG AAAGCAAGGT ACTTTTCACA CTGGGACCTT
GCAAGAGGCC AACAGATTG AGGGATGCTT CAGGTGAGAC TTGGCCCTCT TCTTATGGG CAAGACCTTC CCGCAGAGT
TCAGATCT

SEQ ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTAAA AACTAGGTCT TCCCAGGTAG TTTGAGGAGC
ACCAGGGCAC ACTCAGGGAA GGGACATGTC AGTGTCTGAG AGCTCACGGG AGGAAGGTGT AGTGACAACA TGGACCATG
TGGAGTGAAT TTAGACGGCT CTTGGGTNAG GAGAATCATC ATGTAACAAA GCATTAAATC ATTTGGAGAA ATTCAGAAAA
NTCGTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTTGAAT TCGG

SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTTAT AATGTTATAA GGGGGTTGAG GGGTGTCCA CTGGAGCAGT GGTTCCTCAA
CTCGTGTATG CATAGGAATT ACCTGAAGGG CTGTGTTAAA CACAACTGC AGGGCCCACC CCCAGAGTTT CTGGTTGGGG
AGGTGTGGGC TGGGCTTGAG GATGTGAATC TCTCACAAGC TCCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA
CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGS

SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTT TYCCGGGGAR GTCAACATA CTTTTTCAAC ATAGGATKTC TGACAGGAGG CCCTTGGMCA GGGTTCCCTG
ACCTCTGYTT CAAACCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGG GCTGCACAAG
GTCCGGTAGG TCACAGTGG CCAGCACACA GTGGCCCCGC CCAGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA
KGCAAGCTCA TT

SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GTCAAGTCTA CCATCATCTT AGAAGGAAAA GGCATGGTGG GAATTCAGCA CCTGAACCTG TATTTACACC AGCCTCGGCA
TCTGGCAAGG RAATAGCAT TGTTCATAGT GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAACCTG
ATCTAGGGAG ACTCCAARGA TCCAACAG

SEQ ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTGAAGAAG CTGATAGCTT TTACACAGTA
TTAGATTGAA ATAATGGACA GAAACACATT CTGTCAAGA AAGGGGGAGA GAAGTCGTG TTCAAGTTTC AAAGCAAAA
GCAAAAGTGA AATGATTGA GGATTTCTGT TCTAATTGGA GATGATTCTC TGGTTGTTAG AAATGGCAAA TATTGATGAT
TGTTGTCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTCGTCTC ACTT

SEQ ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTGCTCTCTC CTGTGCTCTC AGTGGTCCC TTCCCTGAAG TGCTCCCTT CTCATTAAAT ATAGCCTGTG
TCTGAACATT GTGAGCTATA AGAACCTCA TATTAATGGT TAAGGACTG TTGGAAATGA TGTGATTTTA TTAATAATGG
GGTCTTTGTG GAGGAGTCAG GAATGGTCAA AATGAGCTTC AGGTATGGGG CTGTCTCTRT GCTCTGATA CCAAGGGTCT
GGCAAGCACA AAGGAAGGTG G

SEQ ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CTGAAGCCAC TATATCTGCA TATGTATCCC AGATTGAAC AATTAAGTAA AAAGATGGTG AATGATGAAA
GCCAGTTTTC TGTCTGTAGA AGTGAGAGT GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA
GTGTAGTTCC TGTGCTTTT AGTCTTATAG ACTTCATTTT CAAAGTTCT TAGCACCCC CTCCCCCTT TGGTGAGGTT
GTTTCACATA TTTTCTAGAC AATTAGATT TTTGTCAAA GTCTGTGTT CATCCGGAGA GCCTCTGATC TCTTAAATGA
TTTTTTAAAT TTACATACAT TAAGGTTTAC TCTGCTGTAA AGGTCTGTGG GTTTTAAATC TGTCTCACAG TTTTTCATA
TGTGCGCTT CTGCTGGGA ATACTCTCCC AGATATTCCC CATGACTGGC CCTTATCTT CAATCAGATC

SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GTGTTTCAAG GGAAGGCAAC TMCAAGTTTG TGCAGCTGAA TTTCTGTAA GTTAAGACAG ACTCAMCTTC TCAITCAATC
TGGGGCAGTG GATAACCTTT CTGAATAGAC CCACTGTTC ACGGACAGGG ATAGAGGTTT GCCTTCTTC TTTCTTGAA
TTTGGAGTGA GCACTAGGGA GGGGAAGTGC ATGGGTGACA TGAAGAAGGT GAAGATGTAG TAAAGCATC ATCCAGGTAC
ACATTACGG TGCTGCAGAA TTTTCAAT ACACTGAGG GAGTCTGTAG TGGCAAAGC AATTACTGAG CACAAAAGCC

121

AGTCCTCAAG GGCTGATTCC ACCTTCCCTG TCCAGGGACT TTCTCAGCAA ACTTTGTTCA TGAGCAGTTG TTGCTTTGA
TGGTCTTAGC CAGTTTTTGG TGCAGGGGTG TTCTCTGGT ACTAGGGCTA GGGCAGCTGT TTAAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCCACT GGAACCAGAG AGCCCCCTCAG GGCAGGTGGG
GCCTAGGCCA GCCCCCOCG AGGAAGAGTC CCTTCTCTCT GAAGCAAAGA GCAGAGGACC CACCCACCA GCCATGGGCC
CACGGGATGC CAGACCTCTT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CCGACAGCCC TCCCACCAAG
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGGCG AGAAGAGCGT GCCAAGTACC TGGCGGCCAA
GGAAGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGCG CCGCTGCCGG
TTTTAGGGAG CAAACGTCTT AAAGCGAGC AACGCCGTTT AAGCCTTGA GGAACGGCTA GCGGAAGAAG TTTGTGAAA
ACAAGGGGCG T

SEQ ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTGAGT ACGCAGAGCT CAAACAGAC GTGTTCCAGA GCCTGAGGGA AGTGGGCAAT GCATCCTCTT CTGCTCTCTC
ATAGAGCAAG CTCGTCTCA GGAGGAGGTC TCGATTGTC TCCATGCCGA CCTTCCAA ACATCTTGCC TAGAGTCTAC
ATCAAAGAGG GGGAGCGCCT GGAGGTCCGG ATGAAACGTC TGAAGCCAA GTATGCCCCG CTCACCTGG TCCCTCTGAT
CGAGCGGCTG GGGACCTCA GCAAATCGCC ATTGCTCGCG AGGGTGACCT CTTGACCAAG GAGCGGCTGT CTGTGGCTGT
CCATGTTGGA GTTCATCTG ACCCGATTG GAGCTACCTT CAGGACCCAT CTGGCGGGC CACCGCCACC AATGCGTATG
ACGTGATGA GTTTTTGAGT TCACTGCTGT GAGCGCATGA GTCGTGTACT GAATCCTGTG GACAACGGTT AAGTTACA

SEQ ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAGT GGGGGTGGC CAGGGGCCA GGCCAGCAT GCACCCCAT TTTTTTGGG GCTGATCCCT GCCCCAGCTC
TGCTGATACC CGGGGCCACA GCGTCAGGCC GTTGGGGGTG GAGKTAGAGG TGGGAGAGCA GGGGAGAGAG CCTKAGGAGC
CACAAITGGG CAGACAGAAG CGG

SEQ ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATTGCA CCTTACAGAC TTAGGGAGCC TTTACCAGAG ACGCCTAAAA CGCCCCAGGT TCAGCCATTG TGCTGAATAG
AGTGGAAATAT AGAACCAGGG ACAGAGTATT TCATTTAACG TTGATATATA CTTGCTAAGG AAACACTAAC AATACTGTAA
CTTGTATAAA GGACATAGTA TTGAAATGGG AAATAGAGGT CAGGCTCACA TCATCTTAGT TTAATGCTGG GCAACTTTTT
CIGATTCTG TAGTCCCTG GAAAATGTGT CCTTCGTACC CATAAGTGG TACAAATGCA TTGTAAACCA TTTTGT

SEQ ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGCGAC TCCAAGCTCT CTGCTGGCT CCCAGCTGTG GGAATCCTTT AGGCTTGTTT TCAACCTACA
CGTTAAAAAT GCTTCTTGGT GTGTTTGGG AGGGGGAGAG GGAACTGAG CTCCTCTTG ACCTCTCCA ACACCTTGA
CTGCTTACC CAGCCATTTT CAGTAGCTAC ACGGGTGGTC ACAGAACT GGGCGGCACT CGGCACACAA CACAGAACCG
GGGCACTCCA TGCAGGTGCG GGAACACATG TCGGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAAAACGA
GGAAGGATTC CCTTCAGATT CCAAGGATGC CACAACCCG ACGGGCGGCT TAGGGAGGCA CCGATTATCT AAGGAAAAAG
GCCACTGTTT G

SEQ ID NO:67: (Length of Sequence = 413 Nucleotides)

CTGCTCCTTA TGTTTTTATT TCCAAAGTTT AGAATTTCTT TGCTTCATAG TATTATTTTA TTTTACTAAA TTACAGAGTA
AGAAAAGCTT TTCATTTTAT CTGATTTTAT TCTTAGAACA AAAATATTAC GATCTTCTAT ATTTTGTGTT TTTTGCCAAA

122

AAGTGTAGGC AATTTTACAT CATCTTTTTT CCCAATCAGT TTGTGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT
 AAATGAAACA GAAACTCCAA GGCCAAGAAG TGTCATCTTT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA
 TGTAGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGGT GCTGGGGAAA ACTGGCTAGC
 CATATGTACT TTA

SEQ ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGTTAA AAGACCAACG TGTTGGNTC AAATATAAAG GCCACACCTT TCAGACCGAA CCTACTCAAA GATCCTTTAC
 TTTGCAATAA TTTGAAGTGG AGAACCAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT
 GAAGGAATCC ACCTGCATAG GCCACGCGTT CCACTCTGGG TCAAATGCCT CCACGATGCA GAAACCTTTT TTTAAAAAAG
 TGCAAGTCTA ATTACCTACC AAGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA
 AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTTACATA TG

SEQ ID NO:69: (Length of Sequence = 389 Nucleotides)

TCTAGAACCT GGACCCACCC AGCGCGTCTT TTCTTATCCC CGAGTGGATG GATGGATGGA TGGATGGTAG GGATGTTAAT
 AATTTTAGTG GAACAAAGCC TGTAAGATGA TTGTACATAG TGTAATTTA TTGTAACGAA TGGCTAGTTT TTATTCTCGT
 CAAGGCACAA AACCAGTTCA TGCTTAACCN TTTTTCCTT TCCCTTCTTT GCTTTTCTTT CTCTCTCTC ATACTTTCTC
 TTCTCTCTCT TTTAATTTTC TTGTGAGATA ATATTCTAAG AGGCTCTAGA AACATGAAAT ACTCAGTAGT GGATGGGTTT
 CCCACTTCTC CTCAATCCGT TGCATGAAAT AATTACTATG GTGCCCTAAT GCACACAAAT AGCTAAGGG

SEQ ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGGCAGCC ATGTATTAAAT TGTACATCCA AGGAACTGT GCGCCAGGGG TCTTGTGTGT ATTTCTGAGA
 AGAGGGGTGA GAAAAGGCAC TGTTCAACA TTTGCTTCTG CCTGAACGTG CACCTCCAG TGCTCTCCA TCAATTAGGA
 GAACTGTCTT GAAGAATGCT GCCTCAGCTT CTGAAGAGAA GACCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG
 CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGNGCCC CAGTGGAGG CCTGGAGCTT GTTGACCANN GCAGCAGGAG
 ACCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTTGCC TGAGGTCATT CACATGCTC AGCACCAAGT CCCATCTGTT CAGGCAAATG CAGCGGCTA CCTGCAGCAC
 CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTTAGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA
 CAGAGTTTTG GAAGTTTACA AGAATGCTTG TGGTGCCCTT CGAAACCTCG TTTTGGCAA GTCTACAGAT GAAAAATAAA
 TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTGTGTGC GGCTGTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG
 CTGTGTACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAAT GACATTCAAT CGAGATGCTC TCTCAACCTT
 AACAAACACT GTGATTGT

SEQ ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTTT ATATGCTTCA CTIAGGCTTT CATTTGAGTA GACTCTAAAA ATTCTGCCTT GCTTAAGTNC TAACACTGCC
 TCTCAGATTT CAGTTTTGGA CATTGCACAA CTAAGACCTT TTAACGCAT TTNCTTGCTA ACTCGGAAGA CACATAGTCT
 GCAGCAAGAC ATTCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGTT
 GCATTAGTTC CCTCGGAAGT ATTGAAAAAN CTTTGAAATG GGAAGGAAA TTTTGTGCAC CTAATGTTC TGAGGTACCC
 AGAATGTCTG GGGTT

SEQ ID NO:74: (Length of Sequence = 402 Nucleotides)

123

GTGCTCAGTA AATACAAATT GGATGGACTA GAGAGATAGC CCGAGGACA CTGCCAAATA AATAACAAAT TGTGCAAGCA
 GCAGGCCGCT GTAATTAGAC CAAGGAGGAC AGTCAGTTAT TAATATCAGA CACGTGGCAG GGTAAACAGC CACTGAGGGT
 GGGTACAATG AAGAGAGTCA CTTTCTGCAC CCTCAGGGAC TTCCCTTG TG ATGSCCTTCT AAAGAGGGCT GAACAGCACC
 AAGTGCCCTC GCTGCCCTCG GTTCCCTGCTG CCTCCCGGT GCCTTGGGTG CCCCACAAC AGGGCCCTGG GTCCCTCCCA
 TGTCCCTCTC CCTCCTACAA CCCCTCAGCC CCTTATCTGG CCAGCCATTA TGATGCCCTAT CAGTATGAGG CCAGATGAGA
 GT

SEQ ID NO:75: (Length of Sequence = 454 Nucleotides)

GGACCCCGGG CCGCGAGTGT GGCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGTT CTAGTAAATA CCGCTTGCTG
 TGTTTTGATG TTGGTGGCTA AGCTCATCCA GTGTATTGTG TTTGGCCCTC TTGAGTGTAG TGAGAGACAG CATCTCAAAG
 ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGA AGAGGTGGTC
 ATGTGGTGCC TCTGGTTTGC CGGACTTGTC TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTGATTTG AATATCTTTC
 CTTCTCGNCC ACCACGGCGA TGAGCAGCCA CCGGTGAGT CCTGTCCCTG TTTGGTTGCC ATGCTGCTTT TCTGCTGTG
 GACTTGCGGC CGTTTGCTCA TTACCGGGTA CACCACGGAA TGCACACCTG GCIT

SEQ ID NO:76: (Length of Sequence = 313 Nucleotides)

GCTTTGATAG CTAGTGTCT AAAAGTGCTG NTTATTAAAT AATCCACCTN TTTCCCACT TAAACATCC CTCTTACCAT
 ATACTAAATT CCNGTAGCCC TGGGTCTGTT TCTGGACTCT CCGTCTGTC TGACCCCTC CAGGTACAC TGAGTGAGGT
 AATGGTGGCG TGAGAATCCT CTGGGAATCT GGCAGGNTCA CCCNGAGCA GTCCACCCN CAATCAITA NCATCGTTCA
 GAGTGGNCTG AGTGTCTCA CACATCACT CTGCCAAATG CACTTTAGGA ACTGTCAAAT TCCAAAGTTT CAA

SEQ ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCGTA GCCCTAAGTC GTTTTCCAA TTTAGGAAGC TCACAAGCA GATCTGCATT GTCAGTACC AGCTGTTGT
 GAACCTTTGT AAGCTGTCC AGGTGTCT CAAGAAAGGA AATCTTCTGC TTTTGGGAGT GAATCCCCC ACTGTCTTCG
 GGCTCCATTT CTGCATTTT CTGACTCGA GTCTGACGT CTGAAAGAA CAGCTTGCGA AGGTGTGGC SGGTCTGGAG
 TTCCCGGCA ACTGTCTCT CCAGACCCTT GAGGTCTGC TTGTGACTGC TCAATGTGCG TCGTACAGAA ATGTGAGCTC
 CTGCAGCTTT GGTGCTCTT TCGTGTCTT TCGTCTTTT AGCTTTCTCG TAGTCAAGCC TGAAGGCTT TCTAAGCTCT
 AACTGGAGCT TCTGATTAA GGTCTTTGA GCTCATCAA TGGTCT

SEQ ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCGGTGGC GCAATGGAGA GAATGTGCT GAGACAGAGC GCTGGCTGG GGAGGAGGCA GCGCTGGNG CCGAGCTCTG
 TGAGGAGACC CCGTGAATG ACAACTCATC CATCGTGGTG CGCATCGGC CCGAGGAGCG GCAGAAATAC GAGGAGGAGA
 TCCCGCTCT CTATAAGCAG CTTNACGACA AGGATGATGA AATCAACCA CAAAGCCAAC TCATAGAGNA GCTCAAGCAG
 CAAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCGAG GAGACAACGA GAAGGT

SEQ ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTTTCTGCT CTGGGAAGTG ATGACTCGCA GGTGGGCTT GCGCTGGGG GCTCCAAGCT GGGTGTGTG GGTAGGTGGG
 GGCGGAGACT TGGCAGGAT GACCTGTGTT AGGCTGTGTC CATGGCCAC AGGGAGGAGG CCAGGGGAAG CCCGAGCACT
 GACGTAGCCA TTCCAACAG GGCTGGGCA GGCTCGTTA GCACTGTTCA GGTCAACNCC CAGCATGGCC
 CCGCACTACGCTG GGCAGGCCA GGAGACACAC TGTCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

124

ATGATTTCCTT GCCTGINATA ACCTATGCAC TCACAAAGAT GAACTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC
 GAAAGTATTT CTCCITTCCT GTATTCITTT TCAAAGTGCC GAACTGGGC TCGGAGATAA TAGACTCCTC AACCAGGAGA
 ATGGAGAGCG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC
 TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTGTGGTGA ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC
 CAGGTGTTAC AGACTCGCCT GGTNGATGCA GCCAAGGCC TGAACCTGG TGCCTGCCA CTGCCTTGAC ATCTTTTATT
 AA

SEQ ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTTTAAAT AGAGACGGGG TTAAACCATG TTGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG
 GCCTCCAAA GTGCTGGGGT TACAGGTTTG AGCCTCTGTN CCGGCCCGG CCAAGACTG CCTATTCTAA ACGTTGCTGA
 GGACGTGGAN CAATCAGAGC TCTCCTNTCT TTCCAGTGGG AGTTTAACAT GGCACAACG CCTGAAAACC GTTTGGNGAT
 TTCTGT

SEQ ID NO:82: (Length of Sequence = 394 Nucleotides)

GGGAACCCCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTGTTCGA GGCCAGGGA TTTTGGGGGA GTTCACAGTG
 TTCTGGAGGA TATTCCTCTC TTCGTGGGG GAATTGCTG AAACATCAGG NAACTGACA ATGCGAGAGC AACAGTCTGC
 AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA
 GTNAGGGAGG AGTCTGAGT GAATCCAGCA GCACTNCCAA CATCAGGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT
 GCCTTTTINAC ATGAGGCAAC TTCGAGTGTG AGAAGCACAG AGGNTAACA TCACAATCAT CCGTTCAGT GGAG

SEQ ID NO:83: (Length of Sequence = 308 Nucleotides)

ATAAGACCAT TGGCAAAGG AGAATTCATG AACTGAAAGA TCTGAAGTAA TTCCCCAGAA TGTAATGTTA AGAAATAAGT
 TAAAAGGCAG AGCATAATGA GTCTAACATG TGTGATTGAA GTCTTATAAG GAGAGAAATTA AGAMCAGGCA ATATTTTAAA
 GGRATAATGG AGAAAATGGA ATAATTGATG AAATATGTGA ATATATATAG GGACCATATG CATATGAMGG CCGGGGGTTA
 AATAAAACGA AATCTACTTG TACATACTTT ATGGGATTCC TGCAGCCCGG GGGGATCCAC TAGTTCTT

SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTTTAACTTA ATGGCAATTA AAATCACTG GCAAAAAAA TCACTAGAGA TGTCACTCCA TTATCTTACC AAATAGTGTA
 TTTTACCAT CTTTACCTA CACCTTGAG TAAGGTGGAA TAGGTTAAG TTACTGGCAT AATAACACTT CATTGAATTC
 ATGATAGTAT TTAACATGTT AAAACTGTTT AGTTGAAAAG TTCACATGCA ATTTATAATT TAAAAATATG CTACATATAT
 TTCATAAAW TACAATAGGT CATACTARAC TTTGACTAAA ATTAAGAATG TKTTTCTKTC ATAATAATGC AGG

SEQ ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCCGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA
 TATTTAAAGT CAGCAATAAA GTCAGTGGC TCCAAGRTAA TACATGTTGC CAAAGAGTCA TGCATGCCCT CCTGATGGGC
 TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGAGTAT GAACITSTGG GAAGGCTTTA CCACAGTGAC
 ACAGTAAAT GTCTCACGTA GATCTGRGCT GAGTCCCCAC CCAAACCTTG AGCTCCCCCTT CCA

SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

AAAACAAACC AGCTTTAATA CCAATATAGT TCTCTCTTAA ATACCGTGTT TCCAGGACA AATGCAGGG CAGGCTCTTG
 GCAGAAAGAG TAGAAAGGAA ATGTGGAACA AAATGGAATG GATGGCCAG GCCAGGGTC CCTGCCCTGG GCACTAGGGA
 CTGGGCTGCC TCGGGGATGG GGGAGTGACA GCAGCTCCCC CTGGTCCAST TATTGCAGAG GCGTCGGGGG CTCCCTCC

125

TCCCCAGGCC TGAAACATTT CTCAGGATTA CTTCTGACCT TCAGCCCCAG CAGGGCCAGG GCCTGGGCTC CTCTGGTCTA
GGATGGGCCC CTTTGCCCCA AAGGGCCTTC AGCTAAGGCG TTGGGTGGG CGGGAGGCC

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GCCTTTGCTG CTTATTGCA TCGATGGTGA AAGAGATGTC AGGAGCACTT CTCTGCTGAG GTGGCTGAGA CGAAGAGSAC
TCCTGCTGCCA GCCTTGCCGC ATACCTGGCA ATTAGCCTGT GTTCTTCATC AAGCCGGTTT GAACTCTCAA GCATGCTCCT
GGTAATAAAA GGAATTCTCTG AGGAGGGAAC AGAGTGAGAG AACAGGGTGT CGTTTCATGCT GGTTCAGGT CTGGGAGGCA
CGATGTGAGC CAAGTTGAGT GGCTTCTCAG GCTGATCTGG

SEQ ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGGCTCTC TTACACCCYC TCCCACCCGA GGCTCCCCAG AGATAGCAGA GAATTCGAAG AGGTGCGCCG GGA CTGGAAA
GAAGTCCGNG NAGGCCGCT TCGAGTCTA CACCCAGCC TGCTTCCAG CCTACAYCCA GACCCAGCTC AGACCTTGGT
GACCACCCCA TCCCTTTCTC CGGCTGGCTG GGTCGGGGG ATCCCTCTCT GTGCTGGCT TCCAGAGGCA GGACAGGCT
CCTGGTAAGC CGCAAAGTT GCTGACCTCC TGACTTGGTC TGCTTTTAT TAATATCTGT ATTGCTGATA ACCGTGCTCT
TGACTATGTC TCCCAGGTCA TGTCCAGGT CATGGAGAAG CCGTGCCAC AGTGACCTT CCCATCTTC TGGGGGGCT
GCTCTCCATC TGGATCGTAG GAGGATATAG GTGTGTTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GTCCCTCTG GGGACTCTT TTCCCATTT ATTGCTGCTG TGTCCTTAC CAGTTCCTTG CAGGATTCCC TCCTTTTAAA
ATGCCCTTAA ATCTAGCTTT GCCTTGAGA CCCAGTGGG TGCTGCTCT GCGTTTCT TCCTGCCAAG CCTGAATCAA
TGTTTCACT CCAACCTCT GCCAGTTGG CCGCTCAAAG CTGGTGGCT CAAGACTGTW AGCTGGCAG AGCCGCGNGG
TGAAGGGAGA AGCTCTTGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCCTCTGCG CCAGCTACCC TTTGGCCCCA
TTGGGCCCTC GTMTGCTCT CCAGATTGT ATGTTTCAAG NCTGTCTG TGTCTTTG TCTG

SEQ ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTAC
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA
AAGGGCTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGGG AAAGGGCTAC
TACCTCAAGC TGGACAGGGC TACT

SEQ ID NO:91: (Length of Sequence = 364 Nucleotides)

GCCCCAGGT GAGGGCTATG AGGGGTCAGG GGTGAGGTC CCCAGGACCC TAGTCCTTGT CCCCTTCCCT GTTGCTAAAT
AAAAGTGAAT AAATACTAAA TAAATACAAC TGGGGCCAG GCGCTCCCTG CCTTCCCCCT CCTCTCTGTG ACCCGCAGCA
GAGGGGGCAG TTTAGATGGA GGGCTGTCTG TCAGCCCCCT CATCCACTA ACCCATCACT GCCTCCAGG GCAGGAAACC
AGGGCAGGC CAGCTGCGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCCACAGCC CCTTCCACT TGAGTCTTAG
CATGAGGCAG CAACAGAAGC TCTCTCTTC TCCAGCTAA GTCC

SEQ ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAAT AATAAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGGC AGGCCAGGC CAGTCTAGTA
CAAAGTTAAG GAGGTAGGGA GGATGGTGGG GAGGAGGGG CCGACTACCC TGCAGGACGC GGGAGGCTGC TCAGACTGTG
GTGATGTCAG GAAGGGCCGC ACCTTTGGC ATGGACGATG CACTAAAAA AGAGAAAG

126

SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TOGGCCTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA
 CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCGCTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGGGTGACA
 TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT
 GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCAATCCA GGGGCACACC TCTAGCCCAG GCTTTGGAGG
 GGCCCACTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CTTCACTACTA GAACGTCTG CCATCTTTAT TTCTTTGTTT TCAGGAAAAT TGGAGAGAAA AGTATTTCTT TTTTAAAAAT
 GATTATTATA CTTTAAAGTC TGGGATACAT GTGCAGAACG TGCACGTTTG TTACATAAGT ATACACGTGC CATGGTGGTT
 TGCTGCACCC ATCAACCCGT CATCTACATT AGGTATTTCT CCTAATGCTA TCCCTCCCTC AGCCCCCAC CCTCCAACAG
 GCTCCAGTGT GGTAGTGTCC CCTCCCTGTG TCCATGTGTT CTCATGTTC AACTCCCACT TATGAGTGAG GGACATGCAG
 TGTGTGATTT TCTGTCTCTG TGTACTTTG CTGAGAATGA TGGCTTCCAG ATTCATCCAT GTCTTGCAA AGGCATGAAC
 TCATCCTTTT TATGGCTGCA TAG

SEQ ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCC GATCTGCATA GCCTGTGAAA GCCCACGGGG ACATCAGTAA CCTTCTGCAG CCACCATCCA ATGCCATTAC
 TGTNAAGTGA GACTTGGCCA CTGTAGCCTG GGCTGCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGGTTTGCC
 TCAGTTTCTG GTAAACACA AGGTCTGGAG TGCCCTGCA AAGGGTATTG ATGGACTTCC TGCCAGTGAC AGAGCATGTC
 TATGCAAAAC AATCTCTCA GTTACGTTCA GCACTTAAGA ACGGCTAATG NCAATAGGAT CTTTAGCAAC TTTTTCACAT
 CATAGAAGGT GCAATCGCTC ACTTGGGAAC ACTACTGAGA GTGACTTCTC TTTTAAATTT GAGTAGCAGA TGAAAAATTA
 AAAT

SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CTGATGCCAG CTCTTTGTAA TTGTGAAATC TGTACCCAAA CCTCTGGATT AGAATCTCCA GTTGTCTACT
 GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCTTTTCTG TATTGTACAA GCACTATTCT AGATATTAA
 GAAATTTAAC CGC

SEQ ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCTGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCTGTG
 CCAACGGGCC AAGGTGGCGA TGAGCCANIT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAA
 TTGTTGCAA ACGACTGAAC CGGCCGCTGA CCCTCTCGGA GAAGNTGTG TATGGACACC TGGATGACCC CGCCAGCCAG
 GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCGGNOGG ACCGTGTGGC CATGCAGGAT GCGACGSSCC AGATTGGCCA
 TGCTCCAGTT CATCAAG

SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGTNTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCCGGGC AGGACGGCTC CGTGGTGACG
 TTCAAGATCA AGAGGCACAC GCCGCTGAGC AAGCTGATGA AGGCCTACTG AGAGAGGCAG GGCCTTCTCA KGAGGCAGAT
 CAGATTCAAG TCGACGGGC AGCCAATCAG TGAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence = 26 Nucleotides)

127

CCTTTTAAATA ATAATTCTGC TGCTGCTGT GACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA
 AAAACAATAT CGCCCGGGCG CGGTGGCTCA CGCCTGTAAAT TCCAGCACTT TGGGAGGCCA AGGAGGGGGG ATCAGGAGGT
 CAGGAGAGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GCGGTGGTGA
 TGGACGCCTG TAGTCCCAGC TACTC

SEQ ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCTGGCCCG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTTAGTTT TACTGAGTCA
 CCCAGAGCCC TGTGCTGGTG CCTGAGGGTT TGTTCATGG GACAGTCTCC ACAATTCTTC TGGGGAAGGG CCACAAATCC
 CACAGTGTGT CCCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAAACAATT
 GTTAACAAGC CTCTGCAAG TTAAGGTCC ACATGGTAGC CGTGGTACAG AGGCATTTCT CTAGGGTGGG AGAGGCTTGT
 GCTCTACACC AGG

SEQ ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCTGACTTT CTTGTGGNTT TAGAGCCAAG CTCAAGGTAG TAGGCCGTAG GGNCTTATTT TATTTTCAAA CCCCCATCCT
 CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGCCCTTA GTGGGAACAG GTTGAGACCA GCATT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CGAAAAGGGG NNNTATGGCC ATCTTTTATC AGAAAAAGTG ACAAAACGGG AATTTAAAAA ATGAATTTTC NNTCTGACTT
 TATTINNAAT TACACTTTCT TTTTINNAAT ACCAATACAC TTCTTTGAG GATGACAGTA TTAGGAAATC CAATTNNACA
 AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAGTGG CACTAATTAC ACAGTAACTA
 TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACTTGGGC TTTTCTGGTT GAGCCCATTT
 TCAAAAACT G

SEQ ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACTGCG CCCACCCCA TTTCGGTGTN ANCTCAGCTC ACTTCAACCT ACCCTCCCA AGTTCAAGTG ATTCTCCTAC
 CTCAGCCTCT TGAGTAGCTG GGATTACAGG GGTCTGCCAC CACGCTGGGT GATTTTCCTA TTTTGTAGTG ACACTGCATT
 TCACCAGGTT GGCCAGGCTG GTGTGAAGT CCTGACCTCA GCTGATCCAC CGTCTCGGG GTCCCAAAGT GTTGGGATTA
 CAGGTGTGAG CCACCACACC AGGCCCATAT TTTCTTTTAG ACATGCAGGC AATGTTGGTG GGTGTGTCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GTTTTTCCTG CATCTATTGA GATAATCATG TGGTTTTGT ATTGGCTCT GTTTATATGC TGGATTACAT TTATTGATTT
 GCGTATATTG AACCAGCCTT GCATCCCAGG GATGANGCCC ACTNGATCAT GGTCGATAAG CTTTTTGATG TGCTGCTGGA
 TTGGTTTTGC CAGTATTTTA TTGAGGATTT TTGCATCAAT GTTCATCAAG GATATTGGNC TAAAAGTGTG CTGTATTGAG
 GAAACCCATC TCACGTGCAG AGACACACAT AGGCTCAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GGCCTTCCTC AATATGTAGG CGCCACTTTT TCTCCCTGTG CCTCACCTG GTCACCCCTC TGTGCGCGAN ATCCCACTGT
 CTCTCTGGGT GTCCAAACTT CCTCTTCTTA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCCTCATTTT
 AACTTAATCA CCTCCCTTTT GTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAACCTA AGGTTTCATT
 CTGAGGTATA CTGGAGGTAA AGACTTTAAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA
 CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

128

SEQ ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCCGGGATCG TGGCTGCACG CCACTGCAAG ACCAACATCG TCACAGCTTC CGTGGACGCC ATTAATTTTC
ATGACAAGAT CAGAAAAGGC TGGTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG
GTGTGTGGTG ACGCCGACCC TGTGTGGAC AGCTCTCAGA AGCGNTACCG GGCCGCCAGT GCCTTCTTCA CCTACGTGTC
GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCGCCAGNTG GTGCCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG
GCAAAGGGCG GTACCTGCAG ATGAAGGCGA GGGAC

SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GTGTCTCTTT TAAAGAAAAC ATACTTTATT TTGGTCTAAA TTGTGAAAAT ACCCAAACA TTTGATAGAA ATTGAAGTCT
GTCAACAGTG TTATTTATAC TAAGATCAGG ACAGTTCCTT GAGATCATAC TGTTTTATTA CTAAGTTTGG CCTTGTGTTT
ACAAATGTAA TGTTCATATT TATTTGAATT TTAAGATTGG TTAATGTTA ATGAAAAGCA ATCCAATTGT TANTTTTATG
TAGTGCTTTT TCTCTGTATG CCTTAATTTT ATT

SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTTTATTTT CTACATCGA AGAAAATGTT AAAGAGTATC TGCAGACACA TTGGGAAGAA GAGSAGTGCC AGCAGGATGT
CAGTCTTTTG AGGAACAGG CTGAAGAGGA CGCCCACCTG GATGGGGCTG TTCTATCCC TGCGATCTT GGAATGGAG
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGNTCGAAA GACCACTGCA
CTCAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTG CAGATGTAGT
TCCAGCAGTC AGGTAAAGTG AGAGAGGCCG GGATGAAGG

SEQ ID NO:109: (Length of Sequence = 360 Nucleotides)

TTTATNAAAG CAGTTAACT TAGCATTAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACCC
AGTCTAATCC TGTACACTTG TGATTAATTG TGACAATCTT AAGTGTCTCA CTTCCTTCCC ATTTACCAAT TCAGAGAAAG
CCCGTTTCCT GTTTCTCCT CACCATTTG CCTTGGCATC ACACCAACCC TGCCTCGGGC TTCAGCTGCA GATCCTCCCC
AGCCCTCTCT CCCAGCTGGG CTGACTCCAG TCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAGG GTGTGTCTG
GCTTCCAGCA TCTACCAACC CTTAGAGCA ACTT

SEQ ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGG TCATTCAAGG GGGACTTCTA GCTTCTCTCT GGAACCTTT GTCCAGAGCA AAGCCAGGT
TCCAAGGTCC CCACGGCAAG GCTGTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTTCTC CCAGCTCACA GCAAGTACCT
CAGATCTCCA GCAGCAAGGG CGCACTCTC GTGCCACAA GGGCCTTGCA GAAATNCTCC GGTCCCTGGG NCTCCCCGG
CAGGAGGGG GGGGCTCTG CCTGAGTGA GGCCAGAGCA CTAAGCGGCT TCAGTCACAT GCTTTTCAGG TGAATCACTC
CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTAGGTA GAAG

SEQ ID NO:111: (Length of Sequence = 455 Nucleotides)

TTTTTTTTT TATATTTTAA ATGGAATTTA TTCTATCAAC TGCCTGAGAG GACACAATGG GGGAGGGGCT TCGGACCACA
GCAGGAGCCC GACTGCCCA CCTGAGGGCA GGGAGAGCCT GACCCATTG GCCCAGGCC TGGCTCTGTA ACCATTAAAC
TCTTCCCCCA ACTAACACCA ATGAAAACAC CATTCCAGT GACTGGGCTG TGTGTTTGGC TCTGTGACAT GGGGACCCCT
GACCCTAGGG GTCTCGCTG AGCCAGACCT GAGGGACCCA CCGCGTAGG ATGGAGGAAG GTTTAGGCCT CCCTTTTGCC
AGCCAACGCC GGGGGTGGG GCAGACCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTCTTAGGC AATTGACAC
ATTTTATTAC AAAACCAAGT TACATTCATT CCTAAAAGG TCATTTTCAG TAAAA

129

SEQ ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGTGTA GGTGAGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC
 TCGCCACCC ACTGCTCATC TCCTGCTGTA CTGCCAGTT CCTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG
 GTTGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT
 GGAACATCTG ACATGGTGAA TOCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACCTT GACGGCCGTG GAAGACGCAC
 TGGGCGGGCA CTGGTGACCG GTCTCGGGAC AGACTTCACA TCTOCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEQ ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTCA GTGTCTAACA GAAGGGTCTG TTAAGGATGC TTCIGATTIA ACCAAAAGAT TAAGCTTCAG AAACAATCTA
 ACATACTCAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA
 AAAACTGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACACAAA AGCAGGTGTG
 CAAATAATCA CTGCAGCAGC CCTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCIT CAACAGGGAA CTGAGTAAAT
 ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTAAAAGGA TTGCACTTAC ATGCATGTCT GCCATGGAGG
 TCTTTTCAGC CAATGGTTCC ACTCGGAAGG GCAACCACCA ATTA

SEQ ID NO:114: (Length of Sequence = 472 Nucleotides)

TCGGGCCCCA ACGGAGACCT GGGGATGCCG GTGGAGGGCG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA
 CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCCACGNC
 GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCCT GGAGTTCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC
 AGCCCCTAGG CTCCAAGAGC CCCCACCGG GACCCAACCC TGCCCTCCCTG GGGCTAAGCT CTGGCCTGGG GCACTCAACC
 CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG ACCCTTGTGG GTCTTGCCIT GCTGGGGCCA CCTTTCTTG
 CTGGGGCTT CCCCCTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCIT CTGGGGGCC AA

SEQ ID NO:115: (Length of Sequence = 293 Nucleotides)

CTNGGGGCCA TGTGGCTGAT TTCCATCACC TTCTTCCAT TRGCTACGGC GACATGGTGC CCCACACCTA CTGCGGGAAG
 GGTGTGTGCC TKCTCACTGG CATCATGAGA GCTGGCTTTA CCGCGCTCGT GGTGGCTGTG GTRGCTCRCA AGCTGGAGCT
 CACCAAGGCT GAGAAGCAG TGCACAACTT CATGATTGAC ACTCAGCTCA CCAAGCGGT AAAAAACGAG GCTGCTAAGC
 TTCTCAGGA GAOGTTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCCTGCT CTAGGGGATT
 CCTCTCTCT TTTCCAAGAA ATCCCTCTC TTCTTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA
 ACACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAGA
 GAGGCCACGT GCCTCCCATC CCGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TOGGTCCAC TTCTCCAGC
 CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGCGCTGG CTTTCAGAGA GAGGGTGGG CAGGCCTCTC CTGGTACTCA
 GCAGGGAGGA CACTGGGGCA CCGGTAGGGG TCCAAGGGCC ACTTAATA

SEQ ID NO:117: (Length of Sequence = 551 Nucleotides)

GAGACGGAGG CTCGCTCTGT CCCCCAGGCT GGAGTGCAGT GCGGAGATCT CAGCTCACTG CAAGCTCCGC CTCGCCGTT
 CACGCCATT TCCTGCCTCA GCCTCCGAG TAGCTGGGAG CCAGCGGCC CAGCCTAAAA AACTTTTCAA GTCAATATTA
 CTACGATTTA ACATTAGAGT GTGGACATGT GATTTAATCG CTATAGCTAA AATACGTCAA ATATACGTTG TCATGTGCTT
 GAACATGATG CTAACCTGA CAGGATGAAG GAAAGTAATA TTCTTTCAGT GTAGTTCAGG AGAGCATTTG TTTTCTTTT

130

TACCAATTAA CCCATCATTG CTTTTAAACA ACCATCTGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG
TGGGTACTAA AGATGTTTCT GTTTTGTAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA
AAATGGGATT CCAGGAATGG CTCTGTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGGTTC A

SEQ ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCCA AAATCAAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTTGTGCTG AAAGTCAAAG CAGCTTCATT
TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTCACTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC
GGAGGCTGAG GGCTTCACCC TTAGCTGAGC TGTGCGGTGC TGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA
TCTGCATGGG AAGAAAAATG CAGCGTCTT GGTAGTGCGG ATGGGGTCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC
TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGGG CCGTAACGGA TGTTCGTGAA GTTTTGACTT TGAACCACCA
GGTCCCATTG TTAACAAGCT TCTTGA

SEQ ID NO:119: (Length of Sequence = 434 Nucleotides)

TTTTTCGGTT AAAAAAGCCC AAAACTTTAT TTAGTTTTCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA
AACCCTAATC TTACAGTCTA GAAGCATGCC AAGACAGAGC ATTTTCTGCA GACCAAAGAG TCCCGTCAAA GTGATAAAGG
ACACCTGGAA AGTGGCAGGC CAAGGGGCTG GTCCCTTCCC CAAGGGCACT GCATTTTGTGAT GATGAGATTA AAAACAAACC
AACTCCACTA TTAATAATGC TAGAAACATG GGATAGTTTA GCACCACCAT TGATTCTGGC AAATATTTC GCACTCACAT
CGACTGCACT GAGTTTAATG TCCTTTCTCC AGTTTCTCTG CTGAGTAGGG AAGGAGGGAA ACCTGGGCGG AAGGGGCTCC
TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGTGT AGCAAATGCT ACCATGTGGA ACACTCAACT TTATTTGCTT TATTTATATA TTAAACAATT CTAAAGTATT
TACTTCTTGC TTTGACAAAA AATGAAAAAT ATAGGGGCAC TGACTGACTC CTCCTTAGGA GAAAAGGGTT ATATGTACAG
CTATGGAGAG TTACGGTTCC CCCTTAACA AAGGCAAATA TTAATAAAAA AGGGCTTCAT CGGTCAAAAA AGGGCTAAGA
GCTGCAAGCA TTTATTACA CTGTACATCG GGCCCC

SEQ ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTTCTTTCC TTAATCATAT CTGATGCTGG GATGTGGGTA ACCCAAACCT GAAGGCAGCT GCTAAATCTC AAATGCTAAA
AAAATACTGC AATTTTGACA TCAGTGAGTC AGATCAATAC ATCCTCTGGG GCTGATTTTG CTTACAGTT AGGATGAGCC
ATCTCTTAAG CTGCAGGCTC AAATGGGATT AACTGAACTC TATACCTGGG ATGGGCCATG GACTGAGCTG TCCATGCAGA
AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA
GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCATCTCCT CCCACGTCAG
AACTTGAGTA CTGGGTCTTT GCAGCTCAGA GCATTCTCC CTTCCCTTTC CTGCCGAAA GGCTGCTT TTCTGAGAC
ATATGGCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGGG CTTTTTGCTC AAAGAGCTTT GGT

SEQ ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACCCCCAA
CATCTTGGCA TCCCCACCCC AGGAAGTGGG GGGAGGAGGT TATGATCCCT GGGCGCTTCG GCAGAATGGA GAGCTGAGGT
GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEQ ID NO:123: (Length of Sequence = 244 Nucleotides)

131

ATCCAGGCTT TCATTCTAG CCAACCTCA AACACCACCA ACTACAAAGA AAATTTAAAA GTCTAATTG TAACCTTCAG
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATTATTTGG CTTCTTATAC AATCTATCTT GTAAAGTACA TTCTCTTAAA
TTTACATTAT CTAAAATTAA GGTAAAGCAT TATTTAAATC ANTAAATCAT ACAATATTTT ATGGCAATAT GCACATATTT
ATAA

SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGCGTAT CATAGGCGTG CTCACCTCC TCCCCAGCT CCGCCCCGC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT
GAAAGGGGGG AAGCCCGAGG GGCCCGCTGG GAAGGGTGCT GCGCCGTAAA GGCATCCCA CTGGCACTGT GCCTCANCTG
CCGCTTCTCG CTCAGCTCA GCCAGTCGCC GCGCTGCTC TTCAATCACT TGTGTCCCT TCTGCTGCAG AGCTAGTTGG
CGCTTTGGTC TOGATGTCTT GCAGTGTGGC TGCCAGGTG CAAGGAAGGC TGCCCGGTGC CATTCGTGGG GTGAGTAGGA
GCGCTCTTTT

SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCCTCTCCC TTGGTTCTC CATTACCGA GCCACAGTAT TTCTTAAAGC TGGTGGCAG CCTGCACCT GCTTATCTT
GGGAGACAG AGTTTGCATC CTATTACAC CCATAGTTTT TGCATAACCA TGGTGAGAGG AACCATCCTT CCAATCCCA
ACCTCAACCA AAGCTTAGAA AAAGTGCCAT CTTTAACTT TCAGAATCAC TCATAAGTAA ATCTATAGC AGTCTCTGCT
AATGCAAAT TCAATGTGTG CCGCTTATT AGGTGACTTT T

SEQ ID NO:126: (Length of Sequence = 266 Nucleotides)

CTTTAATGA TGTGGTTCTG GTGGATTTA TAAAGGGAGA TGGACCCCTG GNAAGATGCT TTCTTMAACC ACAACCCACA
CATTGGGTCA CCATTTCTC TTCTCTCTCC TTCTGTGGT GCGCGGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT
GTAAGGCCCC TTNTCAGTCC TCAGAGTCCA TTCTCTCTT GTGCTGAGG CCTGCAGTGG GGACCATATA CTCTGTGGTC
TCTTAGTTG CTGTGCGTC TGTTTT

SEQ ID NO:127: (Length of Sequence = 435 Nucleotides)

GTCTGGTCT ATTCAATTG TAGTGGGAG AAAAGGAATG AACCGTACT ATGGCAATTC ACGTGACGT GTGATAATTT
AGTTTGCTAT GAGTTTTCAC TCTTAGGTAA AACCTAGTTA TCTAATTAA TAATTAGTTA TGGATGATAT AGTAATTTTT
TTTTTTTTTG ACTGCGTCTC ACTGTCATTC GGGCTGGAGT ACAGTGGCTG ATCAGATTC GGTGCAGCCT CGACCTCCCT
GGGCTCAGTG ATTCCTCTGC CTCAGCTTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT
GGTGTGTTTT TTTATAAAGC CAAGGGTTTT GCCCATGTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC
AGGCAAGTCC TCCACCTTC GGGCTTCCC AAGT

SEQ ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CCGAGAACC GCCATGTACT CGGAGATCCA GAGGGAGCGG GCAGACATTG GGGGCTGAT
GGCCCGGCCA GAATACAGAG AGTGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCCGTGAAG GCCTCTCGGA
GTCACCAGGA GCTCCACCGG GAGCTGCTCA TGAACCACAG AAGGGGCTT GGTGTGGACA GCAAGCCAGA GCTGCAGCT
GTCCTAGAGC ACCGCGGCG GAACCAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGCC AAAGCGGCTG CAGTGCCCTT
TTGAGCAGGA GCTGCTGAGA CGCAGCAGA GGCTGAACCA GCTGGAAGAA CCACCAGAGA AGGAAGAGGT TCACGCCCCC
GAGTTTATTA AGTCAAGGGA AACCTTCGGA GATTTCCACA CTGACCAGCG AGAGAGAGAG CTTTAGGGCC A

SEQ ID NO:129: (Length of Sequence = 186 Nucleotides)

132

GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAAATCACC AGTGGAACTT TTTCAAAAAA TACACCATTG GCTCTATGTA
 GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG
 GAAGGAGGAT CATTTRAGCC CAGGAG

SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAAACTAT GAAACACTGC TGAAAGAAAT
 CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT
 CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATOMT TCTTTACAGG NTTCGGAAAA GGAATTCTAA AATTCAATATG
 GGACCCAAGA CGGGGGCCGC ATAGCCCATG GCGGGCTTAG CWAAGGGA CAAATCTGGG AGGCCTT

SEQ ID NO:131: (Length of Sequence = 184 Nucleotides)

CCAGGTTGGA TGGAGTGCAA TGGCAGCATC TGGGCTCACT ACCTCCC AGGTTCAAGC AATTATCCTG TCTCAGCCTC
 CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCAG CCAATTTTIG TATTTTTAGT AGAGACGGGG TTTCACCGTG
 TTAGCCAGGA TGGTCTCAAT CTC

SEQ ID NO:132: (Length of Sequence = 270 Nucleotides)

GCNGGAGGGC GTGAGGGGCC AGGAGCTATT CTACACGCCC GAAATGGCTG ACCCCAAGTC AGAACIMTTC GMENAGACAG
 CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCCGSA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGGCG
 GACCTGGGGC CCGGCAAATC CTTCGNNNC ATTGTGGATG TCCACTTTAA CCCACCACA GCCTTCAGGG CACCCGACGT
 GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

SEQ ID NO:133: (Length of Sequence = 529 Nucleotides)

CTTGCACTAC ATAGCATTGT TATTACTGAT AGCTTTATAA ATCTGCCAAA TAACATAGAA TGTAGCCTCA AAAGGATGGT
 CGAGGGTTG CAATCTTTCT TTCTCCACC AGTGGTGTGG AGCAACTCTG TGCCTTAAAG AGGGCACCAT GGAAAGAAAC
 AAAAAGGAAT CTCTTTCAAA ATGCTGGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAACTGCA TCTAATTAAG
 TCCACTCCAC ATTTCTTTGG ACTCTAAGTA TTCTGCACCT GAAGGCTAAA TTGAACTGGC TCAGCCCTAT CTTTTTTGCC
 ACATCTTTAA TTACAAATCT ATTTCTTCTT CCTTTCAATT ACTTCTCTTC TCTTAAGTAA GAAATGTGGG AAATGAGACT
 GGCAGTTTGG TTGTTTTGA TGTGGGTGTC CATTAGGGT CTCATCTTAT GSCCCTTTT GGAAATGTTG CCTTCCTACT
 ACACACCTGG GAGGTTTCCC CAAGGCTCAA CCTTTTGTCT TCAGGTAAA

SEQ ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGTGGCG ACGGTGCAC CGGGATGTG TCCTGCCACC AGAGGAGGTG TGCGTGGCGG GGAGCAGAGG GGCITTTGTT
 CCCAGGTGAA GGTGCGGCTT CTTCACCTTT AGAGGTGCGT GTGTGGGTGG GGGTGTGCTG TGTGAGGTT TATGCTGTA
 ACTGACAGCT GTCCCCAAG CCATGCTGGC AGTGTGTAGG TGTGTTGCCG GCCACCGCAG AGGAATCCTC TGGGCTTCTG
 TGGTTCAAGT GGGGCCCAGC GCAGAGCTCC ATGAGTTGCT GAGCAGCCAG CCCTTCAGCA TCTCCTGGGT TTTGGCAGCA
 GGAGGCGTCC CCTGTGCAA TTCAGGGGGC CGTGGGGGCT GGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC
 CCTTGTGTTG TCCCTTTCT TGCAAGAGGG GTAGACG

SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCAITGTTT TGGTGGGTGT GTACGCTCC CAGAAGACTG AATTTATGGT AGGATCACTC GCAAGGCCCTT GTGAAGGAGT
 CTTACCTAAA ACAAAGAAA TATCAGGAC TTTGTGTGAC TATTTACAAC TCAGTTTTAC ATTTAAATTC AGGCAGTGT
 AATATGCCAA GGTAGGGAAT GTGCCTTTT CAGAGTTGGC CAGGAGCTCC TGGCTGGGAC ACGGAGAGGC AGGTGTGGCG

133

TAAGGCCTCA CTCGCGCTG TGAAGGTC TCATCACACA GAAGCAGCCC TGCCAGCCT GGGTCATTG CTGTCCGCTT
 TTCTCTGTGA CCACAAGCAG CCCTGAACAA CCAGTATGTG TCCTCTTTCT CCAGATAGTG AAAAAGGGTG TCAGATAAA
 CCCACCTAAG TGAAATGGGC CATCCTCTAA ACTGGGGTAC CTCACTGCAC AGGTCTAGG TAGGCTTTCC ACTTAATCTA
 ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCTTGATT GTGG

SEQ ID NO:136: (Length of Sequence = 279 Nucleotides)

CAGTTTGGAC AAAGTAGCAT AGTGACTTIN TTCCTACANT GACTTTGGGA GAAGTINGCA GTTCTGGCA AAGTGACGCT
 GGGCTGTTTG AAAAAGGCAA GCTTAGCCTA GGCTGCCATC TTAAACATT TCGAGGCTGT AGCTTCCTCA GGATCCTTTG
 CCTGTGGTCT GGTGGCCGGC AGTGCCCGT CTAACAGCTT TTAAGTCTGC ACTTAGTGCC TGAGCACCTA TGGCTGTGAG
 AGATGCTAGA TACAGAACCC TGTCCTGTAC CACGTGGGG

SEQ ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAATATTTA ATGGAGATCT TCCTGTGTGG TCTGTATAT GTCATCCGT TTCTGGGTGG TTTAGGAGAA TCTGTACTAT
 TTCAGCATGT CCTCTOCAG CAGCAAAATG AAGAGGAGAA CTAAGTTGTC CATTAAAG GTTTGGATTG CACTTTCCIT
 TCTCTAACAA TATGCGAGTG GCTCAACTT TTCCATACCA GCATGCATAA TGAATGGGTG CCCAGTGGTC ACTATCTAAC
 TGGTTGACTG AAAATCTTTC ACTGAGAAGA CGGCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA
 ATCATCTACC CACTGTGCTT CCTGTCTTC TGTGACACTG CTCATGCTTC TCTGCCAGTT TTTCCGTGTT AGGGTATTTG
 GATTTTTGAG TAGTCTGGAG CTCTAGACC CAAGTATGGA TTTATTACC ACTTATCTAC CCGATTGTGA TACTGAGGAT
 CCTATCCAAC AAAGGGTGA AATCCAGGAT CCGCCTTC

SEQ ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANCCACT GCGCCAGTC GAGTGGTAAT ATGTTMAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA
 GAGGTAAAA TACTGAGTAG ACCATMCTGT AAACAGATGT MCTGTATYC GGGCTTTCAT ATTCCATTTA TAAAGCACAG
 GCAGAGCTCA GAGTAGATTT AAYGTAACTC TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT
 AAATYCAAAT CTGCATTGGG CTGTGA

SEQ ID NO:139: (Length of Sequence = 341 Nucleotides)

ACCTCGCTCA CGCTCTGAC CACGACAGG CAGAGCAAAG GATGCGGAG TTGCTCTGTC TGCCCATCTA AGGGGACGTA
 GGCAGAGAAG CAAAGGCCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCCCAACGG AACAGGAGTC CTTCAACTAT
 TGCCTGCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG
 GAAGGTGGA AGGGGTAGGG TCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGGCA
 GAGTAGAAGC CTTGGGCCTT G

SEQ ID NO:140: (Length of Sequence = 234 Nucleotides)

GTGAAGGGAG TTGCAGAATC AAATTGCTAC ATAGGCCAAA CAAAAAGAA GGCTTTTCA AAAAACATTA AATTACATG
 CAGTCTCAGA GACTATTTAG GCAAAGTTCA AGTTAGGAGC TTTTAGGATG TGGGANIAAA ACTTTAATKG GAGGGGAGGG
 CTGCTTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTAAC TCCTAGCCCA GCCTAGCGTG CCCT

SEQ ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAACTT TCTTCATTT CACTGAATTT TAAAGAGAGA ATCTGTCTC TATTTCTCAG
 AGAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTA TTTTATCTC TTTCTCTACT
 CATGTGCTTA ACTGGTGAAG TGATTCTGTA GAAATAGATC CTTCTGATTC TGATCTCAT TTCCTATGG CAACTACAAC

134

AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC
TCACTCACTC TGGGCCTGCG CACTGGGGTT GTGG

SEQ ID NO:142: (Length of Sequence = 373 Nucleotides)

GTTTTTGCAA CACTTTTTTT TTAAGTTATT GGGTGCAAAA TCCCAAACCA GGATATGTGT ATGTCGTGTGT GTTTATGTTT
TINATTGAC CCTCCCTCT TTCAACCTAC CCCCTTTTAT ATCTAATGTA GAAAAAGCGA AATTGAATCT GGAAGCAAA
CTGTTGTATA TAGTTGGGT AACATCATG AAGAGAGAGC CGGCTGTCC AGTTGTTTTT GAGACAGAGT CTCACTCTGT
TGCCAGGCT GGAGTGCAGT AGCATGATCT TGGCTCACTG CAACCTCCCC CTCCTGGGT TTAGGCGATT CTCCTGCCCTC
AGCCCTCCCA AAGTAGCTGG GATTACAGAC CCGTACCACC ACAACTGGGC TAA

SEQ ID NO:143: (Length of Sequence = 262 Nucleotides)

CGCACCTCG GCCAGAGGGG GCTGCAGCAG CTGCTMCTT TTCCTGCGG CCGCTCTCC AGTCCCTTTT TTAATTACCA
CTCCAMCTGC TGGGAACGGG CGAGAAAGAG GAGGAGCGA GAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT
TGTTACACAG GTGACTACAC TT

SEQ ID NO:144: (Length of Sequence = 384 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTT CCTGTCCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA
GGAACAAGGC TTGGACGTC GAGGTCTCAT CTTCCTGTC ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGNTGGGC
TCAAGTGACC ATGCAAGTCC TGTCACCTCC TTCTAAGAC CCCATCCTTC TCCAGTCC TCCACAAGAG CTACCTCTT
CAAAACAATA ACAGAAACAC ATCAAGCTTG GCGTCACTG AATTCAAGTT CTGATTTCTC CCGTACCCC AGCAACAGTG
CCAGTTTGA TTGTGACACT TTGACCCAGC ACTTGGTTTT GAATGTTCTT TTGGCTGTG ACCG

SEQ ID NO:145: (Length of Sequence = 324 Nucleotides)

CTACATGGAA TCATAAGTKT TCCTAAAAA GGAAGACAGA TTGAAGACA GAGGAGGAAG GTGATGTGAT GATGAAACA
AGGGGAGAAA ACSCAATGTG ATGTGGCCAC GAACCAAGTA ATGAGGACAG CCTACAGAAG CTGGTCAAGG CAAGGAAACA
GATTCTCTC TAAAGTCCCT GGAGAGGGCC TGGCCATGCT GACACCTTGA TTTTKTCCA GCAGAACTC ATTTTGGATT
TCTGGCTCC CAGAAAAGTA AGGGGTAAAT GTGCTGTTTT ATGTCAGTT TKGGTAATT TGTTATGTC AGCCATCGG
AAGG

SEQ ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCTCCT TCCTTCCTA TCCAAGCAAG GGTGTGGTGA CAATGACCTG ATCGGGGTTT AACGCGGCT CTGTCTGCTC
ACCAGACCTG GGTGCTGAG CTCGACCAG CCTGGGCAGC CCAACCCACA GGAAGTGGG TTTCATAGCT GGTCTTCAG
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCGCGCTCC CACCACCCA AGCCAGAGAA TGGGGCAAC TTGTATGAT
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTTA GAGTTATTGC TTCTATGACA
GGTGTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

SEQ ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTTTCTG AGTCCCGTG TGCTAGACTG GCCAGAAGAG AGGGTCTGGG GCTTGGTCAC TCGGCCACTC TCTCTGTTT
CTGGCCTCTT CTCCTTCAC TCCGTCCAG TCTGGTTTTG AGAGCAGGGG CTGTCTACA GCACCTCAGG GAAGGGAGGA
GAGATACCTG CTGCTTCCAT TGCTTTTCCC TTCTGGAGT CGATGCCCTT CTAAGGGTGG GAGCTGCTCC TTGCAGGGGC

135

GGGTCAGTTT CCCAGGCCAT GCGGGGGTG GGCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT
GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCGCCCC AACCCCATC GTCACCTGTC
TGCAACACGA CACAAAGGTT TAAAGATCTG GGCCCAAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC
CCCACCCCC ACCAGGCCTG TTGTCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA
GGAAGATCTT TGATATCAAT GGCTAAGCT CTGCTCAT

SEQ ID NO:149: (Length of Sequence = 368 Nucleotides)

TTTTTTTTTT GTTTCAACA AACTTTACTA AATAACCTG GAAAGGCAAT GAAOGATCTG ACAATTTAAG CTCTAATGAT
TTAAAGCTCA GCTAGAAGAA AGTGAGGCAT GACATATACT GTCAACGGAG GGTGAAGGAG GCAGATTCTT GGAAATGCAA
TGATCCACA CATTTGCTTC AAGGAGAAAC CTGCAGACAT ATTTTCAGGT CTTGCTAAGT AACAAGTGT TATTTGTAAT
CAATACATTT GGGGAAAGTC TGCTATGTAG CTAAGGTCAC TGTGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACTG
GACCAGCAAG GAAAAATACA TCCCCATCCT CAAAAGAATT TTAAGGTG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTAAAG TGATTGCGG ATTTGCCTAA ATTATACAGA
AGAGTCAGCA CCAGTGCCCA GGCCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTC ACCACACTCC
TGCTTGCTG TTGTCTCAG CTAAGAAAGC CTACCCCTGA GTTACCTCTT TCCATCTTAG AGCCTTCTG CTCGCTGTCT
GCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTACCCA GCCCAGCCTC TGCCGTTTTT CCTTCTCCTT TCCACTGCGG
CTGAGCTCTT TTCTCCTTCC GAGAAGCCTT TCCTTCATCT TTCTGG

SEQ ID NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGGC CGCCTCCCTC CTCTCTCCTC CATAGGTGGG GGTGTGGGGC CTTCTTTTTT TTTTGTCTT GGAGGGCAGT
TAAACTTCTC CATTTGCCCTC TCTCTTCAACA CCCAAATGCC AAAGGACACT TTCTCTTTCT TTTGTGGGTA GTTGCAAAAA
AAAAAAATTC CTATGGGTTA CTGCCACTTT TAAATACITT GTAACTTAAA GGCAAAGTAG TATGTCACTG TTTCTTTTCC
CTGTAGTTTA CTTTGTAGGT TAAACATCTT TCCATGTCTT TATTGGTCAA ATACAGTTCC TYCTTTTGTG CAATGTTAAT
CCTAATATGG ACCATTTTTC CTAATGGGAT TACCGATTTT TTAAAA

SEQ ID NO:152: (Length of Sequence = 269 Nucleotides)

GTATTCTGG CAAGTGCTTT CAGGGCCCTC CAGGGTTTGG CTGGTCACCA TGGAGGGGGG GTTCAGGTGC TGAATTTAGG
GACCCAGCA TCTACAGGT TTCCCTTCC ATCTTTCCCA GTGGCACTGT GTCTGAGCAG GTGTGCCAG GTGAGGTGT
ATCCACTGTG TCTGAGCAGG TGTGCCAGG TGAGGTGTGA TCCACTGTGT GTGAGCAGGT GTGGCTGTG CAGGTGGAAG
TGGGGATAIN TGGGCACCTG GGTGCCATT

SEQ ID NO:153: (Length of Sequence = 260 Nucleotides)

TTTCAGGATT TTATTTAAAA TTTATTGTAA TGGGTCCGC GCAAAGGAA GGGGTGGAGG GTGGGTACA TGCAGGGGAC
ACAGGAACAN GATCCACATG GCCAGGNC CACTTCTTC TGTCTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA
NGAGCTGGGG TGAAGAGGG GAGGGGNAAC ACTGGCTGCA TTCCCNAC CCCANGANGC ACCTATAGGC CCTGGACCCA
TGGGTCACCC TGGGCCCTAG

136

SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TGGAACCTGT GAGTGGGAC CCATGATGTA TGGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCTTGAGGTC
 AGCTCCAGG TCGTCTGTC TGGGCCAGGC CTGGTTTTC CAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG
 GGCTCGGCCG GGAAGAAGCC AGCAAAGTCC CCCGTGTCCC TTGCTGAGTA TTCTGTCACA GACAAGCCTC CATTAAAGCC
 ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCCGC CACCACTGCT GGCTTCAGCC CCTTNAGCAG CCCATGGNTT
 AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCIGTNTC TATCCATGCT GTTAACTCC CTGCTCCAA CTGGGGGTCA
 CCACT

SEQ ID NO:155: (Length of Sequence = 40 Nucleotides)

CCATGATCTT ATTTATTACA TCTAGTTTTT CTTTATACCT CTAAAAAAA GTGCCTTTTA GATTTACAGC TTGTGCTTCT
 AAAGCAAAGG TTAACACATC ATGCCCCAAA GGAAACAAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANTGTAT
 GTTACAAGGT TCTAAATCT CTTCAGCACT GGTGGTTGG TAGATTGTAC GACACTGACA TGGTGCTTGG GAGGGTCATT
 TATCTGATGG TTGGAGCAGC ACCATGGGAA AGCTGCCAG ATGGTCTACT GAAGTCTTG GCTGTGCACA GAATGGGCC
 AAGGGCCAGN AATTCATGAG TCCGGGAAC TTTGGNGTC CTTACTCAAT CTCCTTAGTG CTAAAGNTT AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCTCTGGA TTGCTTCGTT GGTGCGAAC TTTAAGAATG GCAAACGTG ATTGGNTCCG ATTAAGACAA GCTTTGTAGT
 TTTCTTCGTG TAAACACCAA ATCCCGCTG GGCCATGAGG TAGCAGAAGT GGGCCGCATC CAAGAGGCC CTTGAAGCCA
 GAGTGTCCG CATGGTAGCC ATCGTCTGG ACTCGACGTC CATGTTGTG TTCAAGTTGG ACAAGACCAT GGCAGGTTG
 GGCCTCCAAT CTCGCCATT CTGCTCCA CAGCAGTGG ACGCGGCAGG CATCCGTCCG GACATGAGCT GGTAGACTGT
 CTTCAGAGGG TCGTTGATTK GGGAGGCTTT TTAGCAAACC TKGGTCATGA CTCGGCGTG TGTCGGCTG TTCCATCTTA
 CTTGCAAGTA GCAGAGCGTG ACCCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAGG GTTTAAACG GAGTCGGAAC CTGAGTAGAT TTCCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATTC
 TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG
 GGATATAACC TGAACCTTTT TTGGAGTGG GGTGGGTAGA CTACAGTAGA CACAAGGCTT GGACATGCAG ATGCTTAGGG
 GATTAGCGTT TTTCAATAAT TGTCTGTTT GTCAGTTCAT TCTGTGTGT TCTTACCTCT ACAAAGGTAC ATTACACATT
 TTAGTTTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGAATA TAAAGCTATT TTA

SEQ ID NO:158: (Length of Sequence = 241 Nucleotides)

TGGTSTGTGG CTCAGCTGCA GGGCAGTA AGTGGTSTC CAGGGGAGTG GACAAGCAAT TCTCTGTCA TTTGCAACTT
 TCTTCAGGAA CTCAGATAAA GAACACTTGG ATAACGATGA TCCCTGTAGA GGGATTTTCT CTGTACCATC ACACATGGAA
 GAGGAGTTTC TAGGTCAGGA AAGGCAGCTN CTAAGCTAAA GGTTTCTTGG TCCCTTNGTC CTGGCATGCC TTAAGGAGGG
 G

SEQ ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCACTAA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG
 GTGGATCAGC CCTATAATCC CAACACTTTG GGAGGCGAG GCGGGCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT
 GGCCAATATG GTGAAACCTA AGCCTTACT AAAATTACAG AAATTAGCCG GTCGTGGTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

137

GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCCTGT CTGTACTAAA
 GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCTGTA GTCCAGCTA CTTGGGAACT CGGGAGGCTG AGGCAGGAGA
 ATGACCTGAA CCGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC
 TGTCTCCAAA AAAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTTGTPTTG ATCTTTCCIT
 TATCCTGTTT TATTGCCATT TACCACGTCC TTTTGGAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGCGCGC CGGGCGAGGA GGCGCAGGG GCGAGGAGGG GGCGGGGGT GGCGACCGC AGGAGGCCAA GCCCCAGGAG
 GCGCTGTG CGCCAGAGAA GCGCCCGCC AGCGACGAGA CCAAGGCCGC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA
 GGCGAGGAG GCGGTGGCA GCTCCGCGCT GCTAGGCCCC CTTCGGGCG GCGCGGCGC CCCCAGGAGC AAGGAGGCAG
 CCCCCGCGA GGAGCCCGC GNCGCGCAG ACT

SEQ ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTTGGTCAA ATAAATCAGA GTACTACAAT CATCAACAT CTGATTCATT TAACATGTGA GCATCTATAC CTGCCATTT
 GTGTGAATAT TCAGTATATA TCTCATACCT ATTCTCATGC CTTCAITTTAT TGTGGTTATG GCTGTAGATA TGGAAAAAC
 AGTAGCTGAG ACAITTTTAT TATGAATAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT
 GATTGTAAAT GCATGATTTT AACATGCTAC CGGCCAACA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TGCCCAAGGA AGACAGAACA TGAGAACCG TCAAGGCAGG AACCCACAG ACTGTCCCTT CCAGCCACA CTCGCCACC
 TCCTGGCCCT GTCCAATTC TGAGCCAAGG CCTCCCGAG GCAGAAGTTG CCTGGTCTC TGTCCCCACA GTGACCTGAC
 TGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCC TGAGAACTTC GTGGTACTG CCTTTGGGAG
 CCGCAAGTG GCCAGAGGCA GGGTAGCTG AGTTCCTGG AGACCCCTT TTTTCCCCA RGTTCGCCAG AGGGCAACGC
 CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCCGGG CCGGCCTCC CTAAACAGA TCTACGGACC TTAACCGACG CCATGCTGAG GCTCATTCCA TCCTGCRGA
 CGTATGCAGA GCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA
 CTATATCTAT TCACCCGTG AAATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCGT
 TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT
 TGGGACTGAA TGAGAAGATC GACACGGTTG CTCTGAAGG CACTTTCCCT AACCTTCGGC AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GTATAATTA TCTGTTTTA TTATTIATG TTTATCTCTT ACTGTGTATA ATGTAGAAAT TAACTTTAC CATAGGTATA
 TACATATTGG AAAAAGCATC TTATATACAG GTTTGTAC TATCTGTGGT TTCAGGCATC CACTGGGGT CTTGGAACAT
 ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG
 GGATGGGGTC AGGAATCTG AATTTTAAAA GTTCCCATG TGATTGTATG CCCAGCCAAG GGCTGGGGAC CACTGTCTTG
 AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCCT GGTAAATCCG AGTGCAAATT CTCAGGCTGG AACCTTATGG
 GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

138

GAAACTTTTG CCATGGGTCA GTTTTATTGG AAGTTCATTT TCCTGAATGT TTGGAAGAAA GTCTAGTGAC TCAGGATAGC
 ATTTCTAATT TCACAGAGTT ATTTTTCGGT TATGAAACAC AGATTGOCCT TGAGGTCTCC TGTTTCTACT ACTGCCOCTC
 ACTTTTATGT GGGCCTCCTC TTTCCTTTGT TTCCTGGAGAA CCITTTCTGT TTCAATCTGT TTTAATTTT CAGCAGTTTT
 TTTCTGTGT GAGTGAGGCT GTTCTCTAGC AGGGAGGTCT GGTGGTCAT TTTCAAGTTC ATCAGGGCTT CATCAGGGCT
 TGTCCACTTC AACCTTTACG CTATAGGNCC CTNTGCACCA TCTGCANTCT TCAAAATGTG CCCACTGGTT CGTTCCCATG
 GANGGCTTGT TGGTAATTG GGCCTTTAGG GGGGGCCATG GAAGGAGCAA ATC

SEQ ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AAAGTGTAC AACAGAATCA TGGACTGACA CAGGTAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA
 AATGTCCAC CCCAAACAGC TCGGAGTAC ACATCACACA GGGCCTCTGG TCCCGGCCCTT CTCAGGTGCT CTGGAGTGG
 GGATCCTTTG AGGGAACTCT GACCACTCCT GTTGTCTACC TAGAGAGCAC GCCACTTGGG CCACCTACCC CCAACCTTTG
 GCCAAAGGAG TGAAAGGACC TGAACCTGT CGTCAACCTC AGCAT

SEQ ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCTGTATAC CCGTCAGCTC CTGGAGCCAT TCATTCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG
 GGACGGTGA AAGGNTCCAA AGACGAAGCT GGTGTTTATC CTTGTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG
 GTTTAATAAG CTTTCTCTAA AACATTTTCC CCTTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT
 TACCAGCTGC GNCTAAGTCA ACTAAACCCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG
 TTTTCAG

SEQ ID NO:169: (Length of Sequence = 346 Nucleotides)

GGTGCTATGG AGAGCCGGCC GTCTCCAGG GGTGAGCTGG GGAGGCTTCT GCGGTCTGAG AGTCCCGGCG ATGGCGCCAG
 TTCCCCAGCA AACCCCTCC AGAGCTGCCC CCGGATGCAC AGACAAGGAG GGGCTTGGG AGTGACTTGA GGCTGTGACG
 GGRTCGCCCT CGGTGTGGC AAGTGAGTCT TCTGTGGCCA AGAGGTCAGA GTCGTCCCTG AGGCTGAGTC GAACACAGAC
 CCGTGGCCCT CATAAATTA AACATAAAG CACAAAATG GCGCAACCA GACAGCATTG GCTTTCAGAC AGGCAGGGAC
 ACGGGGCCCC CTTCTGTGTG AACTGT

SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TTGACCTCAA CTTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTG TTGCACTCTT TTTGTGAGCC AGGCCCTGTA
 GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCCAA TCCTCCCTT GGGGCTGGA GGTCTCTAG TTAATTGGCA
 TTCCGGTCT TAAGGCCACT TTTGGGTAGA GGTTTGGCAA GATGGAGTG TCCAGACCTA TGATCCTCTA AGAAGTTTAC
 CTTTTAAAA CAGCCACCCA AATGGTGGTG GCGTGGGGAG CAGGTGTGG TGAAGGGACT GGGGTGTCT GGCCATKGGC
 ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCCTGCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

SEQ ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGCACTG GCGCAATCTC GGTTCACCTG AACCTCTGCC TTCCAGGTTT
 AAGTGATTCT CCGCTCTCAG CCTCCCAAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTTT
 CAGCAGAGAC GGGGTTTCAC CATGTGGCC AGACTGGTCT CGAATCTCTG ACCTCAAATG ATCTGCCCAT CTAGGCCTCC
 AAAAGTCTG GGATTATAGG TGTGAGCCAC TGCGCTGGC CCTTGGGTAA ACACTTCAA TGCAMCCAAC CATTAAGGT
 A

SEQ ID NO:172: (Length of Sequence = 293 Nucleotides)

139

GAAACTTATA GTCTTGCCCTC CCAACCTTCT GAACACTCCA GTAGAAAAT CTCTCGCCT ACCTTTATCA CCCCAGACC
TACTAGCATT TCTTACTCTC AAAAAAATC TTTTCTGAAA AATCAAGACA GAGTGCAAAC AATCAGCATA ATTTIATTAT
GACARAACCTT TTAAATTTTA TCCCCCTCTC TGAGAGKICT GCTAGGACTC CTTCAGATAA GTGAAAAGA AAKTTTTTAA
AATTTATTCT CAAATCCGAA TTCCAATCTG TATAAAAAGG GCGATTCTCC CTC

SEQ ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GTTCCTCAGG AAAAGGATGG ACCTTCTCTT CTCTCAGAT GGTCCTTCC ATTCCCCTGA AACCTGCATG
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CCTCCAGCT CACCTCCATC TATGCATCTC
ATCTCTGGAT TTGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCTCCA GCAAGCCCTG
CTAGCCACAT GAGGAACAAG TTTCCGTGTC TTCATGACTT CC

SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTGG GAGAGGTAGG GGGCAACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCTCCTGC
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG
TGAAATGGCA GCGGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTGTAGGGC TCCAGGAGGA GGGCCGAGAA
GGTGTTGACC TTGTCTGCCC CCGCACCTC ATGGGGTAAC AGCGGCAMIT TCACGATGTG GAAGTCTTC ATACAGGTCC
TCCAATCTGG TCCAGATACT TGGCCTGGT TCT

SEQ ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCATGCCC TTGTGTACAT AATCTTAAT ATTTATATAT ATTGATATAG AATTCTCTCT ATAATATATG TCATAGAATC
TCTCTTGGGC CTGGCGTGGG AATGTGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG
GAGGATGGTG TGTTGGGATGT ATAGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCA AGATACCCTC TTCAACACAA
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTTCA TTTAATAAAG
TCAATTGAAA AATGAAAGTG CACCCCCCT CCAAAAACA GGAGATTCAT TTAGCAAGAG CCGTTTCATT CACA

SEQ ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGCGACGG ATOGATAAGC TTGATATCGA ATTCCITGAT NTTTTCTAGT GTTATGGTTT
TCTCCCACTC CAATAACTWT TCATACCTKT GGCTKAGTT TTTCCATCTA TAAATCATG TGCTAAATAA TTAACATCA
TCTCTATCAT TGTCAGACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAAATAC AAACATTAGC
CAGGTGTGGT GGTATGCGCC TGTATTCCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTGGGGCTTT AGAGGTCAAG
GCTGCAAGTG AGCTGTGATT GCGCCACTGC ACTCCAGCCT GGGCAACAGG GCAAGACCT G

SEQ ID NO:178: (Length of Sequence = 443 Nucleotides)

GATTTTATTC AAACACAGGC AAGAACAATG ACCTTCAGAG CTGGGTAAAA ATAATAAGTT AAAAGCATGG TTAGAATTTT
AGACAATCAG ATAAAAAGTT TGAAGGAAGT GATTTCCCTT TCCTCTCTTA ATTGATTAAAT TCAACACAGC ATAAAAATAA
TTTGATCTTA TAAAAATATCC TTGTCCAC ACAAATGAAC TGGAGGTGGC CCTAGGATTT CCTTGACTAT GCACAATGCA
CACAACTTAC ATGTCCCTCC TCCCAACTT TTAAGGCAAA AATGGTCTG CATCTTCAGG CAGAGGGTGG GCTCATGCCA
GCAGTCAGCT GTGGTCAAGG AACTGGGGG TCGTTTYCT CCACCGAAAG ATGCCTGCTT TGGGTCCACT TTGGGCGCGG
GATCCCATTT TATTTCTAG CCTGTGCTC ACCACAGGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

140

TGGGGGACCA GCATTGCTCC CAGCTGAGGG GCGCGTCTTC CTCACCACGT ACCGGSTCAT CTTCAAGGGG ATGCCACGG
 ACCCCCTGGT TGGGGAGCAG GTGGTGGTCC GTCCTTCCC GGTGGCTGCG CTGACCAAGG AGAAGCGCAT CAMCTCCAG
 ACCCTGTGG ACCAGCTCTT GCAGGACGGG CTCCAGCTGC GCTCCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA
 GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGNTAC CCGCCGGACA ATCATGGCCA
 ACTTT

SEQ ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCCC CCGGAGTCCC CAAGATCCTG GTGGGAACC GCCTGCACCT GCGTTCAAG CCGCAGGTGC CCACGGAGCA
 GGCCAGGCC TACGCCGAGC GCTGGNCGT GACCTTTTTT TAGGTCAGCC CTCCTTGCAA TTCAACATC ACAGAGTCTG
 TCACGGAGCT GGCCAGGTTC GTNCTGCTGC GGCATGGGAT GGACCGGCTC TTG

SEQ ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCTTTATCA CATTATACAC AACATAGAA AACAGTGTIT CAGAAGAGAA GCAAAGGCCA TTGGCTTCAA ATATTTATGC
 AACAAAGAAA ATGTTCTCAG CCTTAAATG AGCACTTGIG ACTTGTCOA CAGTGAGATA ACTAGTCAAT GGAAGAGTTC
 AACACTAGAG CATGTATCTC AGTCTGTCT CATATTGCTA TAAAGGCTS CCTCAGACT

SEQ ID NO:182: (Length of Sequence = 451 Nucleotides)

GTCTTACTCT GTTACCCAGG CTGGAATGCA GTGGTGTGAT CATAGCTCAT TGCAACCTCT GCGCTCTAGG CTCAAGTGAT
 CCTCCACCT CAGCCTCCG AGTAGCTGG ACTACAGTA CATGCCACCA TGCCAGCTA ATTTTGTAT TTTGGTAGA
 GACGGGGTTT TGCCATGTTG ACTAGGCTGG TCTTGAATC GTGAGCTCAA GTGATCTGCC TGCTCGGCC TCCCAAAGTG
 CTGGGATTAC AAGCGTGAGT CATGGTGCT GGCCTAGTIT GCTCTATTT TTTTTCATC TTTGAGTTT CTAGGCACT
 GGAACAGGC TGCAAGCTC AGAGTCCACA GCTGTAGGC TCATGTGTC ACCATCAAAA AATAAGGTGA CGAGAGTCTT
 GGGTTTCCA GTGTACGGC AAGAGGGTT ACTGCTCAG GGTACACACA G

SEQ ID NO:183: (Length of Sequence = 444 Nucleotides)

CCAAGTTGAC CCGCCGAACC ACCGAC-GGA AGAGTGAGTT CCGTAAACT CTGAAGGATG ACCGGAATGG AGACTTCTCA
 GAGAATAGAG ACTGTGACAA GCTGGAAGAT TTGGAGGACA ACAGCACACC TGAACCAAG GAAATGGGG AGGAAGGCTG
 TCATCAAAAT GGTCTTGCCC TCCCTGTAGT GGAAGAAGGG GAGGTCTCT CACTCTCT AGAAGCAGAG CACAGGTTAT
 TGAAAGCTAT GGGTTGGCAG GAATATCTG AAAATGATGA GAATTGCTT CCCCTCAG AGGATGAGCT CAAAGAGTTC
 CACATGAAGA CAGAGCAGCT GAGAAGAAAT GCCTTTGGGA AGAATGGCTT CTGTCAGAGC CGCAGTTCCA GTCTGTCTC
 CCCTTGGAGA GCCTTGCAA GCAGAGTTG AGGCTCAGCA CCGA

SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GGCAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATTGTCCCC TTTACTTCTT
 GCTATCTTCT TCTCCTCTT TCTCTCTCT TGCCINTATG CCTGTATTTT TGGCAATAG ACAGGCTGCT CTACCCAAGA
 TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTGCGGAG GGTCTTAGCA GCGCTGGTG GCTGCTGTG CTCAGSTCTT
 CAGCTCCATG GGAATATAAA ATGGCACCTT GAATCTCTAG GATTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTTCTC
 TGTCCCCC GTTGTGCTCT CTTGGGTTA TAGGACATGG TAAATATTTA TTACTTTCAG GGAACCAAGT TTTTATTAG

SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC
 TCTCAGGGAG GGCAAGGCAC AGATACCCA AATTCCACCC CAGTCCCAA AGGTCTCCCA GCGGGGCTGT CCAGTCCATG

141

TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGGA GAACTAAGCG AAGGAGGCAA ACGCCAGGGC
CCCTTGCAGGCACC ATGTGCACCA CTT

SEQ ID NO:186: (Length of Sequence = 343 Nucleotides)

GTTCGAATAG CTGGTTTTAT TCTCAGCACA AAAGGGCCCT GTGTAAAAAC CAGAAGGATT TTGTAAAAATA TCAAAATGAA
TATTTGGCCT GGAGGTTGGA AAGTGAAGCA AGGCTGGACA TAGAAAAAAA CTGATCAGTA GTTATTCAGG ATATTATTTA
GGATAAATGA AATAGGAACT TAGGGGCATC TCTTACTTTT CTACAGGTTT TTATCTGGGT CAATGAAGAA ATTGTGTTTA
TCTTGCTGCC CTTGCATCAG GTTTTTTGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCT TTCAGTCCTA
GCTTTTACAT CTTGCCCTTG CAA

SEQ ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGCGGCTC CACCCCTTCC ACGTCATCCG CATCAACAAG ATGTTGTCTT GTGCTGGGGC TGACAGGCTN CAAACAGGCA
TGCGAGGTGC CTTTGGAAAG CCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTTA TCATGTCCAT CGGCACCAAG
CTGCAGAAC AAGAGCATGT GATTGAGGCC CTGCGCAGGG CCAAGTTCAA GTTCTCTGGC CGCCAGAAG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTCACCA CCTGGACTC CTGCGACCGC ATCAAAGACG AATTTTCAGCT ACTGCAAGCT CAGTACCACA
GCCTCAAGCT CGAWTGTINAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CTKCACTATK TGATGTACTA CGAGAKGTCC
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAAGGCT GACGGGATTT GTGCCCAGGT CTTGCCCTAC
CTTTCCCAAG GAGCACCAGC AGCAGGTTTT TGGGGGCCAT TGAG

SEQ ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCCTRGRATT GACGATGGTR CAAACCCAAG ATTATCTTCA
TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG
ACGTCACTGA TACAACCGGT CGGGCACATC TCKCGGCCTA TGCTGCCGTT GGTGC

SEQ ID NO:190: (Length of Sequence = 153 Nucleotides)

TTTCATATGG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG
TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTGGT TTCCCATCCA AGGGTAAGTT TCCCAAATA CCG

SEQ ID NO:191: (Length of Sequence = 316 Nucleotides)

GTATTTATAC ATTTATTTAT ATATGTATAT TTAATTCAGA NGAAACGAAC ATTTGGGGA CAGGAAGCAA GCAGGCCCGG
GGCTGCCTCC CTCCTGCCC ACCTCAGAGT CAGAGTTGGC ACATGACAAA TACCAAGCTC AGGGTGAAGA ACTGGGAGTT
AACTGGGAAG TAGGGKGGC TCTATGCACA CGCAGGCTTC TAAGGGTGCA CGGTATGGGC AGKKGTTTG CACTGGGAGG
CCCTATGTAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEQ ID NO:192: (Length of Sequence = 360 Nucleotides)

GTGGTTTTTG GTTATATGCA GCTTTTGAAT AGCATGTATT GTGTCTTTTT CTCTCTATG AATAATTTTA TATTTATGC
TACTTCTTGA AAGTTTACTC TTGATGCTC TAAGAGAACA GCCAGATGGT TTATATGAAT AANCITTTATC TGCAGGATGG
TGGATTGGTA AATNAGGAGA ATGTTGTTTG AGATATCAAG ATTTATGTCT GGGAACTAAA ATATATAATG CCAATGTGT
TTTTGTCAAT TACTAGAGAA TTCTGTGCAA ACATATCATC TCTTCACATG CTGCACACTT TGTCTTTTGT TAAACAGCAG
GTAGTAGACA GACCAATACC AGTTTCGGT TAAGG

SEQ ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA
CGGGAGAGTG GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG
TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC
AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKTTC TCTTGGCCTG
GGTTGSCGTG GGGCATGCGT CTAGCTTTCA CTCTGGTTCA GGTCCAACAG GGTCCGTTCT GTGCCTTTGG TGCCCCC

SEQ ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATTGGC TTGCTTTTCA TAACATGTAT TTTAAGTAT TTAATCTCTT AATGGCCCTC GTGTCTATTT TATACATCAT
ATCTCTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT
GTATCCCTTC CTCRGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEQ ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTTGTATGT TAAATTATGT GGGTTTTCAA ATTTGTGGAG AATAAGTAAT AGTGACATTA GTTTAAGGAC
AGTGTTCAT CAGGGCATT A TTTAATGAA TCTTATATTT AAATGTCGTG TTCAGGAATT CATGTGAATC TTTCTTTTAA
TAGAGGACCC ACAGGCATGA NTTATTTACT CCTCCGGTGA TAGSTTCTCA CCTGTATGAA AGCGGAAGCA AATTCCAGGT
TAGAACATTA TNCATGTTAT GTAGGGGGGT ATAAAGTGTG TAAGTTTAAAT ATTT

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTTCT CTAAATTTTA AAATAGAAGA CTTTAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT
ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAGCCCC CGTCAGTAGT ACACATTCTCT CTATGGTCCT TCAACAGTTT
TTCATATACA AAATTTTCTG CTATTTTTGC TTTTGCAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CTTGGAGTAG CTGTGCAGCC CCGCCCTCTG CTTCCTCCAG CCTCAGGCC AGTGCCAGGA CAGCTGCTG
CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CCGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGTA
GGGAAGGKTG GGGCAATGGG GAGAGGCAAA TGCASTTTAT TGTAATATAT GGAATTAGAT TCATCTATGG

SEQ ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCTGGG GAAAGGGCTG TTGCTGAAGT GGCCGGTTT TTTAAGCATC GACATTTGCA TCCAAAGTT CAAGCAGCCG
CCTCAGGTT CARAGGCTTC CACCTGATGG CTGCATT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGTTAAATGA TGTGTGAGT GCTATTTAA AAACTACTC TTCCCTTCT CTATGAGTTC TACTTTGGTA
AATATTAATA TTTAACCAGT TAGTAAACT AACACCACTA TTTCAATTCT CTTTGTGCA TAGTAAGTAA ATTTGCTTT
ACTTACTTTA TAAAAAATA CTTTACATT TATAAAGCAG GTTTTAGAAA AACGGTTTAC AAGAAAGTTT GCTCCATTT
CACTGCCAAT TTAAGCACAG GGGAAAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTGAGTT TGTGAAAAGC AACAGGGGTA NGACAGGTT CAGGAAGGAC ACAGACAGTG CCTGTTTTGA GGTCCAAAT
TTCTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATGT CATTTGGAAG GGGCAATGAC TTGTCAATTA TGCAGAACAT
GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAACTGA TGTGTGTGAT AGGAGTATCC CTTTGGAGCC

143

AAAGGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGTCTG GGATGCTGTA CTCAAATACC
 TGCTGGTCCG AATGAGCGAT GACAAGGTTG TTTGGTATTG GGGGCAATAG CCATAGCAGT CACTTGGGAA ATTGTAAAGCA
 GGCACCGTGC AGTGAAGTTT TA

SEQ ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTCCACGCT GATGAACCCG ACGTCCATTT CTCCAAGAAA TTCTTGAACG TCTTCATGAG TGGCCGCTCC CGCTCCTCCA
 GTGCTGAGTC CTTGGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACCGGGCCAT ATTGAGGTTT
 GTGCCTCGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCTCTGTC TAGTGGAGTC CAGGCCCCCA GACTACTTGT
 TACGAGGGCT ACAACATGTG CACTGGGTGC CCG

SEQ ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTCCAAC CCCCCAGGAG GCGGAATGCT GAGCTTGGCA ATGGTGGCCT GGATGGAGCT GATGGGCACA TCCCCACCGA
 GGACCAGGTC CTGGGAGTCC TGAGGAAGGT GGTTCCTCTG GCTGATGCTT GCACTGGCCA AGGGTTTGCA TGGAGGAGGC
 ACACCATGGC GCTGCAGGAC CTGCTCCACG TGTCTACCA CTGCCTCATA GCAGAACCTG AGGTGCAGCT TCTCCTGCAG
 CATGTGCTTT CTCTGCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCCCTT CCCAGCCTCC ACCTCCTGCA
 CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGSCCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC
 CGTGATGCAA GGTAATTGTC GTGCACCTCC TGGGTT

SEQ ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGINT TGGGGACACT TACGCCAAGG CGCGCGTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC
 TGCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTKTGA AGCTCTGTGC TTCATTTTTT
 TTGCTTTGCC TCTAGTTTTG CCTTTGAGT ACCAATGCAG CCAGCCCATG TKTCCCTCT ATGTGGAATG TTAAGGATAT
 TCCACTGTT TCTGGTGTCC TTCTGTAAAT CAGAGCTGCC GTGACCATTC CAGTTCAGGC ATCCTGGTGG CCTGGCTTTC
 TCTGGGCGAT AGAGCT

SEQ ID NO:204: (Length of Sequence = 393 Nucleotides)

GGATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCCCCA ACCCCCATCG TCACTCTGCT
 GCAACACGAC ACAAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC
 CCCACCCCCC ACCAGGCTCG TTGCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG
 GAAGAACTNC GATATCAATG GCTTAAGCCT GCTGINTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGCC CAATTTAAAG
 GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCCGAG GGGAGCCACG CCCTGGGCCC GCAGGGCACA TGG

SEQ ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TGAGCTGCCA CCGCTGGAGG ACATGGGACA ACCCCCGGCG GAGGAGGCTG AGCAGCCTGG
 GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCCGAG CCGGCCCCAG CCCCAGCCCC AGAAGAGTGG CTGGACATTC
 TGGGGAAACG GCTGTTGAGG AAGAAGACGC TGGTCCACAG GCCGCCAGGT TCGAGCCGCC CCGTCAAGGG CCAGGTGGTC
 ACCGTACATC TNCAGACGTC GCTGGAGAAT GGCACACGGG TGCAGGAGGA GCCGGAGCTG GTGTTCACTC TGGGTGACTG
 TNACGTCATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGTNGGGG AGACGGCCAT GGTCACTTCT

SEQ ID NO:206: (Length of Sequence = 172 Nucleotides)

144

CTTTACTGTG GGTGTGGGTG TCACTGTAC TGCCACAGCC ACTNGGAGGG ACACACAGCT TTAACCCCTR TTTGCTTAGG
 NGAAGGGTGG GGGCATTTCG GGTATATAAA CTAATATAT ACACAGAAGG TCCTAGGKAG AAAGCCACCC TGAGCACACA
 TGTCTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTAT TGAATATTGG TTAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG
 TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACTT TCAATCACAA CTCAAATATA
 AAATAACCTA CAAAATCACA TTGCTATAAT CAATATACAA TAATGTATT TTTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGTT GCAGTGTATG GAATGCTTAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
 TGGCCATGAG CTGAGTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
 AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCGAGGA GAAAACATGT CCAAATCCT AAAAGCACGA
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTGATA GGGGGTACTA TGAAGTTACT CCTCCAACAT TAGTGCAAC
 ACAAGTAGA. GGTGGGTGCC ACACCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT
 GTACTTGAGA CCTTCTCCC AGCCTGGGAG ATGTTTTTGG TATT

SEQ ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGTCAGG AGTTCGAGAT CAGCCTATAT ATGCAAGTAC ACACACAGGC ACTCGCACGC ATGCATGCTC
 ATGCAACACA CATGTACACT CTACATGTAC AGCTCACATA TGCAATCCATA CACATGTGCA TGCTCACCCA TACACCAGCC
 ACACACAAGT ACTCATACGC ATACATGGCC ACACACAAG TACACACAGC TACACCATAT GCATATGTAT GCACCTATAC
 ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATACACAGC
 GGACATTTCA TACACAGC

SEQ ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCTNAGGA GGCTGAAGAA GGCATCTCTG AGCAACCTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT
 CCTTGAGGCA AGCGTAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA
 CAATATGTCA ACTTCCTTTT GGCTGCACT TTGTACCAA TCCTTAATTT TTCTGAATG AGCAAGCTTC TCTTAAAGA
 TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAAGCTCA TGTATACTA AGGGGGAGTC TTCCAGGTGT GACATCAGG
 TTATTGGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGGA T

SEQ ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGTTGACATT ACAGGCGTGA GCACACGCAC CCAGCCCATC TAGCATAATG TTTTGCATAG TTGTCAGCAG
 ATAAATATTG AATGACAAAA CTCAGATGGA GGAAGAAAGAA CAAAATAACC TAGTTCTCAG AAAGATTITAA TGAGCAAATG
 GGAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTAGA GTCAGTGGAA TCACACAGGC CTTCCCTCAG CTGAGGGGGC
 TGCCCTGGAGG TGGGGGTGGG GGTACACCTC CTCAGTGGGG AGAGACTTGC CAAAT

SEQ ID NO:212: (Length of Sequence = 370 Nucleotides)

TGGCCGATAT GAGGGGGGTG GACTGGGCC CCGCGCTGCC CCGCGCCT CCCTATGTCA TTCTCGAGGA GGGGGGGATC
 CGCGCACT TCACGCTCGG TGCTGAGTGT CCGGCTGGG ATTCTACCAT CGAGTCGGGG TATGGGGAGG CGCCCCCGCC
 ACGGAGAGCC TGAAGCACT CCCACTCCT GAGGCTCGG GGGGGAGCCT GGAAATCGAT TTTCAGGTTG TACAGTCAG

145

CAGTTTGGT GGAAGAGGGG GGCCCTAGAA ACCCTGTAGC GCAATGGGGT TGGGCGCCCC AAAGGTTAAG TTTGAACCCG
AAGAGCAAAG GAAGAGGCGA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEQ ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCTGTGGAA TAATCTGOGG GCTAACACGG ATAACCTAGT ATAAGAACCA CCCAGTTGAT GTCTATTGTG GCTTTTTAAT
AGGAGGAGGA ATTGCACTGT ACTTGGGCTT GTATGCTGTG GGAATTTCC TGCCCATGA TGAGAGTATG TTTCAGCACA
GAGACGCCCT CAGGTCTCTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT
GTATGGGAAT TTTCTCATA AGAAGGGCAT CCTCAAACC GGAAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTCGAC GGCCAGGTGG TGAATTGGGG GCAGAGAGCG
CAGTGTNGTA GGGGAGGAGA GGTGGTGTCC CTGCTGCTG GGAGCCAGCC TGCCGTGCTG GTGGGCAGAG CAAGGCACIT
TCTGCTGCCG GTGCTTCCAG GGCCTAAGCA GCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGGA ACCAGGGCTG
CTACCCATTT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTGGCCA NAGCAAGTGC GTAACAGGCC CTGAGAAGAG
NGCCAGTGAG CTCATCTGA GTTAATTATG GGCT

SEQ ID NO:215: (Length of Sequence = 260 Nucleotides)

TGGTTCAAAG TCTAGGCCCT CTNAGAGCT GGCTGATTCA GCTTGCCAAC AGTGACATCA GGGTGAGGCT TCCTCTGTCC
ACAGCATTAG CTGCGAATAT CCTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCT TGTTCACATC
CAGTGGAGA GTGACAGCCT GCTCCCCCTA GCTCTCTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGCTTTTC
CTCATGACCC ATTCAACAGG

SEQ ID NO:216: (Length of Sequence = 232 Nucleotides)

CTGGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTTK TTCTCTTCCC TTACTGTCTC CCAAATAAAC
AGTCTCTCAC TCTGTGTGTA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAAATTAG GGGAGAGAGG
AAAACAAAC CAACCAACCC CTANATCAT TTNTTTATG TACATAACGA CCTCATTCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCTTT TNCCTGGG TGCTATGGAG TCCCCAAAC TCCCAGTGG GGCTTATGAG GGTGGGGCAC
TTATTANGIN GTCTGGGAAG CTATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGAGC AAGGACACCG AGTGCTCAAT
NTTCTGCGAG ATGACCAANA TGTTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEQ ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGTAGC AGAGACCAAG GCGCAGGGTG CTTCAGATGA GCAAGAGAAC CCAGTCGAAC CAGATACCCC AGGTGGGCGG
GAGGGACCCC AGACCTTCAG AGGGCTGCCC TGGTGTCTC CACAGTGCAG TCCCTCTGTA TTCCAGAGT GGGATCGGGG
CTTTCAGCCC ACCCTGATGC CTGCCCCCA GGATGGCTGG TTAGTCTGG GTCCATGTCC CAGACCCCTC TATTCTGCTC
CAGGACAGCA GGACTTCAGG TCCTTCCCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC
ACTTGCCAAG TGATTCACTC TTAGGCCAG GGGGAACACA ATGACTATCA TTAGTGATGC AGACCTGGCT

SEQ ID NO:220: (Length of Sequence = 382 Nucleotides)

146

TTTTTGTTTT GTTTAATAT TTTTGATATT CTCTTTGCAT TGAAATGGTA TAAATGAATC CATTTAATAA GTGGTTAAGG
 ATTGTTTAG CTGGTGTGAT AATAATTTTT AAAGTTGCAC ATTGCCCAAG GCTTTTTTTG TGTGTTTTTA TTGTTGTTG
 TACATTTGAA AAATATTCTT TGAATAACCT TGCAGTACTA TATTTCAATT TCITTATAAA TTAAAGTGCA TTTTAACTCA
 TAATTGTACA CTATAATATA AGCCTAAGTT TTTATTGATA AGTTTATTG ANGTTCTGAT CGGTCCCTT CAGAAATCTT
 TTTATATTAT CCTTCAAGTT ACTTTCTTAT TTATATTGTA TGTGCATTTT ATCCATTAAAT GT

SEQ ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTTTGGTT TATTTAAAAA ACAAGCCAAA AAAAAA AAAAACCCTA ACTTTATATA CAAAGTCAAA CTGAAACCAC
 GGWTTATGGA AAGAGGCAAG AWTTATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA
 GCCACGGGAA AGAGGTGCTG GTTCTTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA AACCAGCCCC
 AACACTGAGC TCCTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCTTCC CCCAGGAGGC CTGT

SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCTTCTCT GGGCGGCAC GTGCNAGCA GCTGCTTCG CCCCGTCGTC AACTTTGAGC TGGAGGAGAA GCAACTTTGG
 CAGTGGCCGC GGGGTGGGAA TCCCGCTTCT CTTGGGCAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT
 TTGCGCGGCG CATCAGCGCT TGCTTCGGAC TGTTCGCAAC GTGTTTCCAG CGAGCTGGGA GGGGGGTTG TGA CTGCGAG
 TCGTCTGGGG GAGGGGGACT TGTTTTCTT TTCTCTAGA GACCTCGGCT TTCAACTGGA TCAAACGTTG TCGAAAGGAT
 GTAAATAGGC AAGAGCAAAC TG

SEQ ID NO:223: (Length of Sequence = 376 Nucleotides)

GTGATGGCTG CCTTGAGGGG GACCATCATG TGGAGAGCG ATTGGTGAG GTCTCAGCCC ACAGCCCATG CCCAGCCTCC
 TGCAGACTCA GGTATCCAG CTGGTCGATG GCTCTTTGCA TACCTGGTGC CTCTCTCT CGGGCTTGGC AGGCTTCTCT
 GGGGCTTCT CAGATGACTC TTTTGCTTC TTCTCTGCT TGGCTAACTC CTGCGCCAGC TCTGAACGTG CCTCTTGGC
 TCCCTCTCT ACCACCTCT CCCGTTGGC CAACCTGCTC ACGGCGTCT TGGTAGTGGC TTTGAGGCTC TCCTTGCTAT
 CAGCCGCTG TTTGATTTTG CTGGGCTTGA GGTGGTAAG GCACAGCCCC AAGAAG

SEQ ID NO:224: (Length of Sequence = 445 Nucleotides)

GTGATAGAC ATTGGCATTG GGGTTGCTC CACCTTTGG CTGTCATGAA TAATATTGCT ATGAACACTA ATGTACAATT
 CTTGCTTGA ACGTAAATGT TTTCAATTCT CTGGGTATT TATCTAGAAA TGAAATTGCT GTATGTTAAC CTTTGTGTTA
 ACCCTTGAG GAACTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTTTGA GGGTTCCAAT
 TTCTCTATAT CCTTGGTAAC ACTTGTTATC TGCCCTTTTG GTTAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG
 TGGTTTGAT GTGCATTTCC CTGATAGCTA ATTGTGTGGA TCCCTTTTGC TTTTAGTGGA ATGAAATATC TGGTAGTCTC
 GTATGCCAAA CTAAAGCTAA AATTAAAATG ACTCTGCATG ATGGA

SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TGCTCTGGG ACAGTTTCCC GGGCAGCTCC TGGCCAGCTT CCAGCCCAGA GTCTCAAGT CCAGGGCACC TTGGGCCCAG
 CGCAGGCAGA ATCCGAGGTG GTCCGTGGTC TACCTGGGC CTCTACTCC CCAGCACCCC TGGAGGAGGC AGGGGCTCCC
 CGCCGCGGAG GCTGCCTGCC CTAGGCCAC CTCTGCATGC TGCTCATGGG GCCACCTGC CTCTGGGCC CTCACTCTGC
 CTAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCCAGGGAG GTGGCCCTCA GGCTGCCAG GTGCTGCAC CCCAGCCGGG
 CTTCTCTGGG GCCTCCCGT CGTCAAGCCT ATATCTCTC TGTCCCCACC CCAGCTGTCC CTTGCCAGGG GACTGGCATA
 AAA

147

SEQ ID NO:226: (Length of Sequence = 440 Nucleotides)

GTGCCTTAAG GAGAGAGATT GTGTTCTTCC TCTCTCAGGG GTGATAACTC AGGAAGCCTC TGGGTTGGGA AGACCATCAG
 TCTTTTGTG TTAGGTTTCT TTTCTGTCC CTCTTCCATC CCCAAGATGT GACCCATAA AAATTTTTC TGAGTTGGCC
 AGGCATGGTG GCTCAGCCT GTAATCCCA CACTTTGGGA GGCTGAGGCG GGCGGATCAC GAGGTCAGGA GTTCGAGACC
 AGCCTGACCA ACATGGTGAA AACCCCATCT CTAATAAGGA TACAAAAATT AGCCGGGTGT GTTGGCACAC ACCAGTAAGT
 CCCAGCTGCT CAGGAGGCTG AGGCAGGAGA TTTGCTTGAA CCTGGGAGGC AGAGGTTGCA AGTTAGGCCG GGATTGCGCC
 GTTTGTAICTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

SEQ ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAAGAAG TTCCGGTTCC AGGAGCCGT GGTTCGTCC GACCTGGACG ACCAGACAGN CCACCGGCAG TGGACTCAGC
 AGCACCTGGA TGCCGCTGAC CTGCGCATGT YTGCCATGGC CCCACACCG CCCAGGGTG AGGTTGACGC CGACTGCATG
 GACGTCAATG TCCGCGGGCC TGATGGCTTC ACCCGCTCA TGATCGCCTC CTGCAGGGG GGCGGCTGG AGACGGGCAA
 CAGCGAGGAA GAGGAGGACG CGCCGGCGT CATCTCCGAC TTCATCTACC AGGGCGCCAC TTGCCACAAC CAGACAGACC
 GCACGGGCGA GACCGCTTTG CACCTGGCCG CCGTTACTTA CGCTCTGATG CCGCAAGGC TCTTGAGGCC AGCGAAGATG
 CCAACATCAG GCAACATGGG CCGAAC

SEQ ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT
 TGTTTTAGAA AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAATT CACTGTATTT
 CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAGCTG TCCTGATCAT ATGGCATGCA CACCAGACTG CAAAGGNCG
 TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTTA

SEQ ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTCC CAAGCCTTTG TGA CTGACTT TAAATCCTCT CACCTGCAGA ACAGAGATGG CTTCAAAGTG GGGAGTGAGG
 GAGTGAGCGA GGACCTTGG CTGAGACCTG TTTTCTTCC ATTTCTGCTG TGGCTTCCCA CAGCTCCCTG GTTCCACACC
 AGGCCCTGCT CTGCCGAGA AAATGGATTC CCAGGCCACA GAGCTGTGAG GCCTTTGACT TTGCAGAGAC CAAGCACCCC
 AGAGGCTGTG CGACASGGCT AGTCCCTGGT GGGCGGTCT GGGGCATGGG GGGCAGGGAG ACTKGGAGAT GGGGAGGGCG
 TTGAGAATCC GGGGGTCTT GGATACTTGA CAAATGGCT CAGGTCTTAG CTYTGGYTGC CCCACTGATT GTGTTGCTTG
 GCAAGGTGCA AGTYTTCGGC TGTT

SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCTT CCTGCAGCAG GCGACGAGC TGCACAGGGG TGATGAGCAA GGCAAGCGGG AGGGCTTCCA
 GCTGCTGCTC AACAAACAAGC TGGTGTATGG AAGCCGGCAG GACTTTCTCT GGCGCTTGGC CCGAGCTTAC AGTGACATGT
 GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG
 GGGGATGAGA GTTCTGACTG TCACCTGTGG TATGCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG
 CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTTGACAA AGCCATTCTT CTTAGCCAG GA

SEQ ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTGA ACCAGGAGG CGGAGGTTGC AGTGAGCCGA GATGGCGCCA TTGCACTCCA GCCTGGGCCA
 GAGCAAGGTT CCTTCTCAA AAACCTGGAA ATCTGTTGGG AAGTAGGGGG AGGGCAAGGT TAAACCTAT GCAGGTGTGT
 CAATTAGACT TGTTCCAACT TGAGAACCTG AATTTTGCAT GTAATTGAAA TGTTCAGAA CAAGTCTGGC AGTTTCATAA

GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTACATTA GGGGAATGAG CATGGGATAG GTGCTCCCA
 GTTGGTAGGA TAGCATGAGG AGGTTTCAA AGTAACCSCT TTAAGGGTTA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TTTATTTCGC TATTTCAGT TTGAAGCTAC TATCATGGGC GTTTAGAGTT ATACAAATGA
 CACTTACAAA AAATAAAAGA CCAAGACACC CAGAGTGAGA TGCAATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGCCC
 CGGCGGYTCA CCCCAGGGCT CCGGAGGGG CGACGCTGG CTTCATCCAC CCGGAGGSC CAGGAGCAC CAATCACAGC
 AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

SEQ ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTTTACAGT TTTATTTTTA AATCATTTAC ACATATTCAT ACAAAGAAAA ATAAATTTCA GGATGGAATC CTGGGGACCA
 TGGTAGTTTA AAAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT
 TAGTGTATCT CCCCATGCAG GGGACAACTG NGAAGAATCC AAGCTGCTCC CTCATCTTCC TTGATCTAG ATGGGGGAAG
 GGGATTTTCC AATGCTCTCC CCTAGAAACA TTCAAGAAG TACAGCAAAG GCTTATGGTA ACACTGGAAC CTATTTGCTA
 GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTTCCT ATAA

SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GGCCAGGAGC CAGAGGGCCC CGGGGCCACC CCTGCCGGGG AACGTGATGA CCAGAGTCCA GACAGTGTC CAGAGAGGCC
 GCGSCCGCA GACCGGAGGC TCTGTCTGCC CTNGTGGAC GCTCGCCAC TCCAGGGAG GACGGCCTGC CCGTCGCTGC
 AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCTTCCA TGCTACCTG GACAATG

SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACITTAAG TTAGGATTTT AAAATATTTG TAACTGGCTA AATTTTAAAG TCGTGACAAA TAATTACTTA GTTCAGAAA
 TATACACACA CTACTCTTT AGCCAGTTTC TTCAAGGTN TTACTGTCCC ATCAGATATC TAGCCATTTK CCTTTGCAAA
 TTACATACCT TCTTAAGAGT GTATTTTTAA GATTATTACT TATGCTTTAT GATGATATAG T

SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTCACTCC TTAGGGACAC GATTGGAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGTTATCC
 CTGAGCTGGG CAGTTTCACA CAATCANTTT TNCCTGAGG CCAAGTCTG TGSTTTGATC ATCTTAGCAG CTTCAGAAC
 AGAAAGTAGG TTTACTTTGT CTCAAANTC TNATTCTCGG TGCTCAAAGA AGAATGACCT G

SEQ ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCTTTC TAAGATTCTC TGTGGGAAAA TGACTGTCAA TANAATGCGG GTTCTGGGC CATTCTCTT ACTTTCATTT
 TTGATTACA AATTTCTCTT GAGCACACA ATTATGTCTG CTAATCTCTT TCTTCTAGA GAGAGAACT GTGCTCCTTC
 AGTGTGCTG CCATAAAGGG GTTTTGGGAA TCGATTGTAA AAGTCCCAGG TTCTAAATTA ACTAAATGTG TACAGAAATG
 AACGTGTAAG T

SEQ ID NO:238: (Length of Sequence = 327 Nucleotides)

GTTCGTGGCT GTCACAATAA TGCTGTGATA ATGCTGTGGT TTCCAGCAG GGAGGTGGGA GCGGGGAGGG GGCTGCAGCC
 TGATGAGAGC CAGCTGAAGG AAGAGCTGCC TCTCCCTTCC TAAGCCCTT CCCAAGGTCT GCCCCACGC CCAACCAAA
 GACCACTCG AACAAAGTGA GGATGTGGAT GCTCTTGCTG GTTCCGCTGT TCCGAGAGG GAAAGAAAGG GTAGCTGCAC

149

TGACCCCACT GTCCCATAT ACAAGGGTTK GGGGCAAGA GCATGTGGCT ACTCCAGCA AGGGRAAAAT GGGAGGAGCA GTAGAAA

SEQ ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGTT TATGGTGCTT TAAACCTATC AAAATAGTTG TAAGTAAATG GATTTCTTGT NCTCCCAATA ACAATCTCT
GAGCTAGGAT AGATGTCTTT CTGGCCATTT TACAGGTGAT GACACTGACA TAGGGACTGA GTGGGTAGCT TAAGTNCCAT
GGTTACCAGG AGCAGGACCN ACGTTTCCTG NCTCCAGTC TCATCCIGTT TTCCACTGAC CAGGTGGT GCTCCCTTGG
AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGGNGAA GAGGT

SEQ ID NO:240: (Length of Sequence = 349 Nucleotides)

TTTTGCCATG TTGGACAGGC TGATCTCAA CTCTGGCCT CAAATRATCT GCCCAGCTTG GCTCCCAA GYCTGGGAT
TACAGATRTG AGCCACTGCA CCCAGCCTGA CATGCCATAG TTTCAGCAIT TTCITGGGCA ATGATCCAAG CTGAAGGCTG
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAGG GACAGAAAGG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCCTCTGAAG ATAGGTAGGC CAGGCTGGCT
TAGCTGAGGC AGTGGGTTAG ACCAGCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GTGCAGCGGT CTGCCTTCAT CTTTTAATGG COGGTGGGT ACAGTATAGT GACAGACGGG GGATGGGACA CAGCAGGGGT
GAAACAGGGC AGTCACAGCC GGGGCCGGG ATCTGGAAGC GGGGGGGTC CTCCTCTGG AAACACCGTN TCTGGAAGGA
CACCTTAGG ATCCCTGAC CTCARGGTGC CACCCACAG GGCCTGGTGT TCTGGGAGGC COGGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATATGIACTA CATTTGGTGG AATACGCATG TACAATCTT CAAAATAGT AAAGAGCAA ACAACAAAA AATAGTAGAA
GCACTGGAGA AATACACTAT GGCATAAAT AGTTACGGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT
TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT
CCTAAGCAIT TTATTTTAGC TCAAAATATA AAAATATTCA TCAGTTAGCC AAGCTTTTGN GATGAGAGAT CATAGCCTCC
TCTTTGATAG GGGGTTCTT GGGTTTCCTT GATTTTCATGT TTCAGAGTTT TT

SEQ ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGSCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG CCGCCAGAC CTACTGTCCC
GGGGGTGTTA TGGCTGTCCC TGGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG
GAGCTCTGCC CTGGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CCGAGGGACA TGCACAGCAG CAGCCACAGC
CCCGGGAGC GGGCAT

SEQ ID NO:244: (Length of Sequence = 220 Nucleotides)

CAAATGGCAG TTCTCGAGAA TCGACGAGGA ACTTAAATCT GGACTCAGG TTTCAGTGG GTCTCCGACT CCCACCACCC
CGCCCTCCG NCTGTCTCGC CGCCAGNGT GACCTCCAG CGAAGGAATC TTCTTCGGAT GGGTGACCT TGCCANAGG
TGTGGCACCT GGNGGACTAG GAGGCGCTC CANACTAAGG GCGCTCANTG CGGCGTTCTT

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

150

TTCAATGCTCA TGTAACCTTC TTAATAGTGC CTGTCTGCT GGGTTTGTAG CTGTAAGAGT TCTGCAAACT GGCCCTATAA
 AAAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGCTCTCTTT TCTTCTCTCT
 CCTGCCATGT GTGTGTCTCT CTCTACTCCT CTGATTTTGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCTCCG

SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GGTTTCACCA GGGTTTAATG TGCTCTGATG TTGACCGTCC CTCINAGTNT TCTGGGGAGG AGGGGGTGGG GCGGAGGGTC
 AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTTGTGGG CCCAGAGGGG CTGTACAGT GGATGCACCC TGCCCCCTCC
 CTGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCGNC AGCCTNITGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC
 ACCATTACCA CTGGACCCAC CAAAGACCC

SEQ ID NO:247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TTTACTGACC TCCCCAGCCA GGCAGGCCAA CCCCTCCGAG CAGGGGAAAT GTCCATCTAG CTGCCCTCTG
 CTGGGTGCA GCCTATGCCA TGAGAGGTA CTGGAAGCAG GAGGGAGCCC TGGCTAGGGC AGGCCTTAA CGCAAGGGAA
 GCTGAGCAGA GATCTGCACA CTCAACCCCA TTTGATATTC TTCTCCTCCT CAGTCATGGC CAGCGTGTG GTGACTAGAC
 CGGTGCCAAT AGTCCGGTTC CCATCTCGCA GGGTGAAGA ATGGCCTTTC TCTTAAG

SEQ ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGCT GGGCTGGGAG CAGCTGCTCA CCACCATTC CCGCACCATC
 AACGAGGTGG AGAACCAGAT CCTCACCCGC GAGGCCAAG GCATCAGCCA GAGCAGATG CAGGAGTTCC GGGCGTCTTT
 CAACCACTTC GACAAGGATC ATGGCGGGC GCTGGGGCCC GAGGAGTTCA AGGCCTGCCT CATCAGCCTG GGCTACGAGC
 TGGAGANCGA CCGGCAGGGT GAGGNGAAG TTCAACCGCA T

SEQ ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG GGGCCCTACC CTGCTCCTA CTGTGGCAGG AGCTTCCGCT ACAACAGAC ACTCAAGNC
 CACCTCCGTT CAGGCCACAA TGGAGGCTGT GGGGTGATA GTGACCCATC AGGTACGCA CCCAACCCAC CAGGTCCCT
 CATAACTGGG CTTGAACTT CTGGCCTGGG TGTAACACT GAAGGTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT
 CGAGGGGGAG TTTTGTAAAT CCAAATCTCT GTGGTTTCAT GCTTTGTATA TGCTCAGAG AGGGCACAAT AATCCAAGAG
 AAGGTCTGTG AGCCCNATC CAACACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

SEQ ID NO:250: (Length of Sequence = 397 Nucleotides)

GTATCCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAAACTG CTTTTRACAT
 GGGCTGTATA TAAAAATATT AAAGAGAAAC AAACTGTAC ATTCTCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC
 CTTGTTGCAA ATATTTTTCT CCTATAGCAG TAAGTACAGC ATTAGAAGGT GATTAGAGAG TCTGTTGATG AAACACAAAT
 GTATGTTTTT ATTGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT
 GTGTGGGGGT TAAATACCTT CCCACTTGCA AGTGACTTGC CTGTNCCCGC TGCGGGAATC CTGTINCTTG GGTGGGA

SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCC CAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT
 ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCTNCCCG ATTCCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTGATT
 GGAGAGNGA GTNAAGGCAT CCACGAGGTC CTGGTGTG CCATTCAGAA GTCANGACAT GGACCTGCGG CGCAGCCTTT
 TCTCTAACAT TGCTCTCTCA GGGAGGGTAC TACCTT

151

SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGACTGTTTG GGGGTCTCCC AGTTTAAAGCA AGATATTTTAA GCCTTATTTT TCTTGGCATG
 CTTGGATTCC CCAGTAAAAA AAACCTCTGC CCTGGGCTGA CAATCAAAGT TCTGGGAAGT AATATGGATA AGCAAGCTGG
 AAATGGAGAA GGCTATTCAC TGIGCCCTGGG TCCTACTGTT TTCTGGNTGG GAACTGCTTT TCCATTAGGC CTGGTGTGCC
 CTGGAAGGGA NGAGCCTCTT GCAGAGACTA CAATCTTGA TGGGTCTTTT GCCAAGTTT AAGGTAGSAA CCCA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCCAGCCAA GGTGGTGAGG GCAGCTGTTT CTAAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC
 TCAGCCTACC CGTAAACTGC CACCCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC
 CAAAAACCAA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGCGAG GCGGSCAGTA GAAGAAAGGA
 AACAAACACA AGTGGGTTC ATTACAAATA GACATGAAGC CTGAAGTGCC CAG

SEQ ID NO:254: (Length of Sequence = 413 Nucleotides)

CTTTTCTTA ATATATTAAAT ATTTACCAAG GCAAGACAGT GATTTATGGA CATTTAAATT AGTTAGCTT TGTCTGCTG
 TTCTAAAACA TTGTGTACTG TCTGATAGAC TTTTAAAAA CAGTGCCTTT CCAGGATGAT TTATGATATG CAGTATTGTT
 TATAGATGCC CATGGCTTAA CCTTGAAAAG TCAATTAAGT GACACAATTA AGAGAGATAT GAATAGTGGT AGAAAAAGCA
 TGTACTCTGG ATAAGTGGGG GTAAATCTAG TATTTGTAT TCCTGTGAGT AATATTGTCA NTAGTATTTT TTAGAAGGTT
 TAATTTTTTT ATGGGTTATA AATTCATGTC ACTCTCTGTC AATGGGTACC ATCAGTGGGA ATGCGGAAT TATCCATGCT
 TTGGGGGTTA AAA

SEQ ID NO:255: (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TTGTACCTTC TCTCCTTAAG AGTTACAGTG AGTGAAGCTA
 CTCCTCAAAT GGAGCACCTC TCTCCAGGAG AGTAAGAAGA TCACATAAAT AGAAAGTGAG CTTTGGACTC TAACAGACAT
 AGGTTTATAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAATGGG
 TAAATAATAA ATACCTCCTC CTCAGAAGTG TTACAAAGTT TATATGAAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG
 GAGCTTAGTC ATTGTTTATT TTCTCCCTCA TACCATACA TGNITCATT CTAAGT

SEQ ID NO:256: (Length of Sequence = 241 Nucleotides)

GTAGAGATGG GCTCACTATK TTGCCAGGC TGGTCTGAA CTCCTGAGGT AGGAGGATCG CTTGAGCCTG GGAGACAGAG
 GTTGCAAGTA GCGGAGATCA CGCCACTGCA CTCCTGCCTG GGTGACACAG TGAGACTCTG TCTTAAACAA AACAAAACAA
 AAAAAGGCCA GCGCAGGGG CTCACACCTG GTAATCCAG CACTTTGGGA GGCCAAGGTG GGTGGATCAC CTGAGGTCAG
 G

SEQ ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGTG CTTGCGCAGA TCACTGTAA TGATTGCTT GTGGGACGCT CCGTGGATGA GGCTCTGCGG CTGGTCCGAT
 TAAGAAAACC AAGAGAGGCC GGGCACGGTG ACTCAGCCT GTAATCCAG CACTTTGGGA GCGGAGGTG GCGGATCATG
 AGGTCAGGAG ATTGAGACCA TCCTGGCTAA CACAGTGAAA CCGGTCTCT ACTAAAAATA CAAAAAATT AGCTGGGCAT
 GGTGGCAGCG GATTGTAGTC CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA
 TGAGNCCGAG ATCGTACCAC TGCACTCCAG CCTGGGGCAA CAGAGTANGA CTTGCTAACC CCCAACCAAC CCNCCAACCC
 CCGGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

GAAAAGAAGG AAGGAAAGAG GGGAGGGAGG GAGGAAAGGA GAGAGGGAGG GAAAGAAGGA GAAAATGCTG GAGCAAAGGA
GGTGGTTAC ATGATTCTC TAATGGCAAT GAGCTGCTT CTGGATGAAA TACAGAATCA GAGCGAGACT CCGTCTC

SEQ ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAATT CCAATAGCTT CACAGTTTAA
CTGAGGTTTT GGAAAACTT AAGTGAATTC AGCTGATGTT TGAAATATCT GTCTACATTT AATTAGATGT GTTGTATTTA
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTC AGTAAGAAAA ATAATACCAG GTGATTTCAA
AAAGGSCAGT GATCTATAAA CACTCAAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TTTCTTTTGT GGTGAGAACA
TTTAAATCC TTTCTTTTGT CTATTTTGAA ATATACAGTA CATTGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAAC
ACCAAGACTT ACCCTCCTG TCTGTGACTT TGTACCTGT TCACCACTCC TCCATCCTC TAGTAAGTAC CATTCTACTC
TCTACTTCTA TGAGCCTGAC TTTTAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTCTGT GGCTGGCTTA
TTTCACTTTA ACATAATGTC CTCTAAATT

SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCCTGAG GCTGGGCAGG CAGGGAGCTC TGCTGCACA ATGATGTAGC
CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGA GGGGGCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT
GGGSCACGT CCTTACAGT GTGTGTGCAC GCACATGTGT GTGTGTGTGT GTGTAATAGC CAGGGCAGAA ACACACCATG
TAGGTCAGGC AGGACAGAAA CACATCATGT AGGCCAGGCG TGGTGGCTCA GGCTGTAAAT GCCAGCACTT AGGAGGCCA
AAGTGGGCGG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGGCCAACA TTGCAAAACC TCATCTCTAC TAAATTTCTA
AAATTAGCCA GGCGT

SEQ ID NO:262: (Length of Sequence = 382 Nucleotides)

GGCATGGGGT CTGGCTTTAA TGTTAACTG ACGTGGGTCA CTGAACTGT TCAGGCTGAT CTGAACTCC TAGGCTCAAG
TGATCCTGCT GCCTTGGCT CCCAAAGTGC TGAATTACA GGAATGAGTC ACAGCACCA GCCGGCTGTG TTTTGTMTT
TGTTTTTAC CCGACAGGT NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GGTAAACACA GCTCACTGCA GCCTTGATCT
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTTCAGAGT AACTGGTACT GCAGGGCCAC GGCACCACAC ATGGCTAATT
TTTAAATTTT GTAGAGACGA GTCTTGCCA TGTTTGCTCA GGCTCCAGCT GTTGTATTCT TT

SEQ ID NO:263: (Length of Sequence = 447 Nucleotides)

TGTATCAACT CAGAAATTC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG
GCCTGTAGC TTGTGGGCTG CCCAATCCAT CCAACCTTG GCATTGGGAT CAATGTGAT GAGGACAAGA CCTTCAACAG
TGTCGGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATTGT AGAGAAATTT
AGGTACTGCA GGACGCAAGG GATCATGTCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAAGGGA ACACAGGGGC
TCCCTCTTC ATTCCAGGG CATCCCATG GACCCGACA AAGTTCTGAA TGATTTCTG CATGTCTCG AACTKGAACA
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)

153

TTTTCGCTGT CAACAGACAG TTTATTCTAT ATACAAACAC AATTTTGTAC ACTGCAATTA AATAGAATGG AATGAGCGCT
 CCTCCGCATT CCTCCCGAG TGACTGGTTT GGCCGCCGGC CACTCCATCC CCGAGTGGGA CTGGACCACG GCCCTGENTG
 CTGCCACTGA TGTGTGNGCC TGCACCCAC GTCCCTATGC CCGAGGCGCA ANTCTGCTCT CCCGGGGACC CCAAGNCTGG
 NGCACACGG GGGAGGGCGG GGCCATGGAG AAGGCACTGC AGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCCGG

SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TGGAAGTGAT CAGGAACCAT AGTTGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC
 TGGAATGGTT AGAAGTGAGG GAGTTTGCCC CGTCTGTGTT GTAGAGTCTC ATAGTTGGAC TTTCTAGCAT ATATGTGTCC
 ATTTCTTAT GCTGTAAAAG CAAGTCCTGC AACCAAATC CCATCAGCCC AATCCCTGAT CCCTGATCCC TTCCACCTGC
 TCTGCTGATG ACCCCCCCAG CTTCACTTCT

SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGCGAG GCCTGCGAAG TGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTACGC AGGCAGCTTC
 CCGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTTAGTGACT TTGACGGTC AATGGAAGAA TGACCCAAAG
 AAGGCTTCAA GGCCAGGCCT GCACTTCTCC ACCACAAAG CCCTCACTGA TAGCACCAC TCCCCACAC TCAGCTTTNG
 GGCTAGGTC TGGGTACCC AGCTAGAAGC CACAGGACCC TGAGGCGTCC GAGGGT

SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTTGTTTTCA TCATGAGCTC GATCAGATGT CTCTGATCT TCAGACTGGT GGTGTCTAT AATGTCTGT GCACGCATTC
 TTGAGCTTTC CAGGATTTCT GTCTGTTCTC TCTGTTTATC TACAGAAGAA ACTTCTCTCT TGAGTTCCTG TTCTTGTAG
 CGCTTGAAC TCTCTTCTCT TTCTGGTTTA CGATCTCTCT CTTTCCATCT ACCCTGTCTG TCTTCTGTGA GGTGCGAGGG
 ACTAAGAGAA CGAGATTCTT GAGGTCTGAC AACTTGGCTC AAGAGTCTGT GTTTTTCAT TTTTATCAT CTCCACTGTT
 GTAGGCATCA CTGTCCGGAG AATGTTCAAG CCGGCGCTTT CGGGGGACTG TCTAGGGCTG GGACTCC

SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGTT ACCTCTTTGG AGAGAACATG GATCTGAATC TCCTGGGCAG CGCCCGGTC CAGTTTCCCT ACGTCACTCC
 TGCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCA AGACTCCCTG CGGCTGGTGA GGTACAAAGA
 CGATGCCGAC AGCCCCACCG AGGACGGCGA CAAGCCCGG GTGCTCTACA GCTTGGAGTT CACCTTCGAC GCGATGCCC
 GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGGC AGGCGAGTAT ACAGCCCCAA GAGCCCT

SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACATGTCTAT TCAGGTCTTT TGCCCATTTT GAAATAGCAT TGCTTGTCT TTTGCTGGAT ATTAACCCCT TGTCAAGTGC
 ACAGTTTGCA AGTTACCTTT TCTCATCTTA TAGGTTATCT CCTCACTCTT GATGTCTCT GTTGTGTGC AGTAGCTTTT
 AAGTTGGTG TAATACCAAT GTGTTTCTC TGCTGCCCTT TTAAGTTTCA CTGGGTCAA AGTTTAAAT TTGTGAATTC
 CTATATTTT AGGGCAATTC TCCTGCCACT GTTGGAAITA TGCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT
 CTGTACCAAT GGAGATGATG CTGGATGGTC TCTATCATAA ACCATACCT CATCAACACA AACTGCAATT ACACAAGGGC
 TCTATATCAT GGATCTCCAT TT

SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAGC CCAGACCTAG GGGAGTATGA TCCACTTACC CAGGCTGACA GTGATGAGAG CGAAGACGAT CTGGTGCTTA
 AACTGCAGAA GAATGGAGGG GTCAAAAATG GGAAGAGTCC TTTGGGAGAA GCGCCAGAAC CCGACTCAGA TGCTGAGGTT
 GCAGAGGCTG CAAAGCACAT CTTTCAGAAG TCACCACGGA GGGCTACCCC TCAGAACCCC TTNGGGGCTT GGAACAGAAG

154

GCGGCTCTCT CCTTGGTGTG ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC
TGTTGTCTTT CCTGATCCCC TGCTCTCCA GAGATCTTGA CAGAACTGGA GCGCA

SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TGTTACAGTT CCTTTCTTT GTCTTCTTT TTCTATCTT TATCTATACT TCGACTCTC TCCTTTTCC TCCTTGTTT
TTTAGCCTCA CCTTTATGCT TATGACTGTT CCCACTAAGA TTCCACGTT GATCATCAAT TTTACGNTA TCTGACTCC
TACTGCGACT GGCACGATTG GTCTGTCTAT CCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGGNCAC
CAAATGTTT ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGA ATTTGAAGTG TATGTTGCTA TCAGATCAAG
TGCAGGAGAG GTATAAGGCT ACTGGA

SEQ ID NO:272: (Length of Sequence = 394 Nucleotides)

GTGTGTGTG TTGAGTCGGA GTCTCGCACT GTTGCCTGGG CTGGAGTGCA ATGGTGCAAT CTCGGCTCAC TGTAACCTCC
GCCTCCCAGG TTCAAGCCAT TCTCTGCTT CAGCCTCTA GTAGCTGGGA TTACAGGCAC CTGCCAGCAC ACCTGGCTAA
TTTTTATAT TTINAGTACA GACAGGTTTT CACTATGTTG GCCAGGCTGG NCTTGAATC CTGACCTTGT GATCTGCCCC
CCTCAGCCTN CCAAAGTTTT TCAGATTTTT TTAAGGAAAC ACTTTTAACC CTTAAGGCTT TCTTTCAAC TCAGATCCCC
TTACACAATT GATCAGACGT GGCAGGTTT TGCTCAAAG TTTTGGACT GGGTTCCAC TTTAGGCTTA CTGA

SEQ ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCTGTAC CCAGSCTGCG AGAACGIRAG TTIRAGGAGC CGCAGCATGA TGTTCGAGCC GGTCTTACC AAAGGRATGC
TGGAGGTGTT TKTGCCCCG ACCCACCACC CGCACTGCTC GCGGATGAC CAGTCCACCA AGGSCATCGA CATCCAGAAC
GCTTATTTRA ATGGAGTTGG CGATTTGAGC GTGTGGAGT TCTCTGGAAA TCCTGTGTAT TCTGCTGTW ATRACTATTT
TGCTGCAAT AATCCCACG

SEQ ID NO:274: (Length of Sequence = 348 Nucleotides)

TCCCAGTTGT CCCGATTGTA ACTCAAAGG TGGAATATCA AGGTGTTTT TTTCATTCCA TGTGCCAGT TAATCTTGCT
TTCTTGTTT GGCTGGGATA GAGGGGTCAA GTTATTAAIT TCTTCACACC TACCTCTCT TTTTCCCTA TCACTGAAGC
TTTTTAGTGC ATTAGTGGG AGGAGGGTGG GGAGACATAA CCACTGCTTC CATTTAATGG GGTGCACCTG TCCAATAGGC
GTAGTATCCG GACAGAGCAC GTTTCAGAA GGGGACTCT TCTCCAGGT AGCTGAAAGG GGAAGACCT GACGTACTCT
GGGTAGGTT AGGACTTGCC CTGTGGT

SEQ ID NO:275: (Length of Sequence = 396 Nucleotides)

GTTTGGTGAA TTTGGTCTGT GATAAAATTG GAGTTCAAGA AACAAACAGG AAACACAAG TGCCCCCTCG CCCCCAGGTC
ACCCGAGTGG CAGGSCAGTG ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCTGTGCG GAATGCTCT CCTCCAGSTC
CCCTGCTCC TGTGTCOCAG CCACATGCAC CTTCCTCTA CTTCTGGGAT CCTGCACCA GGTCTGCCCC TGTCTTCTCA
GGGCTGCTCC TTTTGGNCCA CAGGACCTCA GCTGGAATGT TGCTCTCTCC AAGAGGCTT CCTGACTATT CAGCTCAGAG
TGGCCACCCA GCCACAATCT GCCATGTGCT TTGGGGGATT GTCTGTTAAC TGCAACATA CTGGCAGCCC ATAAT

SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTGGGG AGGTGCGCA AGGGGCGAG CCGGGGCGC CGGCGCAACC CCGNCCCAG CCGCACCAC CGCCGCCCA
GCAGCAGCAC AAGGAAGAGA TGGCGGCCGA GGCTGGGGAA GCGTGGCGT CCCCATGSA CGACGGGTT NTGAGCTGGS
ACTCGCCCTC CTATGTCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCCGGTGC CGCAGAATGA TGGCCCAAT

155

CCCGTGGTCC AGATCATTTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCCGAGC TGGTCTTGCA GCGTTGATGA
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEQ ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATACGAC AGGGCTGGCG CCGAGTAAT TCAAGCCCTT CGGAAGTGTG ACCGGCTGCC AGGCCTCGGA TGCAATCCTG
GAGGCGGGAG ATTGCGCCIN AAGACTGGCT CGAGCCGCCC AGGGGCTCCA TGGGAGACTA ACGCGGAAGT YCCAGCCGTC
CCAGTGCCGT GACGTCCCCC CTGGTGGGG CCTGCACCCG ACTACT

SEQ ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCTGTAATC CCNGCACTTT GGGAGGCTGA GGTGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG
TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCAG CTACTCGGGA
GGCTGAGGCA GGAGAATGGC GGAACCCG GAGGCGGANT TGCAGTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GTGCTGGGC TCAGGGTTGG CCAGCTTGCA GAGGAGCAAG CTAGTAGAAA TATTGCAGGG TTCCAAAAC CAGGTCAAGC
AAGATGCCAT GTCACCCCTG AGCATGCCCTG TCTTCCGAGG GGTGTACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGNAC
TTGTATAAAT CACATGGGTA TGTCTTGGT TCAGTGATCT TGGAGTGATG ATGGTAACTN ATGAACAGAG AACTTTYAG
AACTTKGGTC CTGTCTTCT CCTGAACT AGACAAGTTT CACCCCTCT CCTGTACCCA ACCCAAT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTTTAGCAG CTTCTTGAA ATTTAAATA TATGTGAAG TATCTCATTT ATATGCATTT CTAGTTTCTT TATACAACAG
AATAACTTCT TTTACATCAA ATTTCTGAAT TTGACTAAAT TTAGAAATRA TGAATCTCA TCCATTAAAT ATAGTCATAG
AAGGAAGGAA ATATGAAAAT TAGGATTICA GATGTTTGAA CATAAAGAT AATTTTAAAC ATTGTCTAGTA ATCTATTCT
TTTTTTTTTC GAGACGGAGT TTTGCTCTGT CACCCAGGCT GGAGTGAGT GCGCGGTCT TGGCTTACTG CACCTCTGC
CTCCAGTTC AAGTGGATT TCCTGCCTCG NOCTCTGAG TAGCTGGGGT TACAGGGGCA TGCCAACATG CCGGGGCTAA
TT

SEQ ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CTTAAAAGA AAAAAAGAAA ATTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA
CTGAGAAGGT GGCATTTGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTCC AGGCAGCCAC CCTTCCCAGC GGCCACCATG
ACGGTGTCTT CATTTGTTA ACCATTAGTA ATCATTCAIT CATTCAITCA TTTATCCGAC GTCAGCTGGA GGNCCTGCCC
GNGGGGCATG CGCTTAGATT TNGGAGGCCT TCCGGGATGC TTGCGCTCCA ACGGGGGAAG GCCGACTTGG GCT

SEQ ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCTTGGCCT CCCAAGTGC TAGTATTATG GGCGTGAACC ACCATGNCCA GCCGAAAAGC
TTTTGAGGGG CTGACTTCAA ATCCATGTAG GGAAGTAAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTTCTAA
CANATGGCTA TAAINTAAGG GGTTAGGGT CCTTTTTTTT TTTTCAGGGA TACATT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGCGC TTTACTCCTG GTCCATGGC GTAAAGATGT GGCTGGGCCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG
GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCAGAAIT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA

156

CCCCCTGTC CCAGACACAG GCACCCCCAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCTTCCCGG GCCTGGGCCT
GTCAAGTCTG CCTGCAGGAC CCTGCCATTG TGCTCAAATC ACAACCAITTT TTTGCTTCCA ACATTTTAGG GTGCTTGTGC
AGTGAGT

SEQ ID NO:284: (Length of Sequence = 340 Nucleotides)

CTTTGGAAAT GTAAATTGTT ACAAACTTAC TTTAGAGCAA ATTTAGTCAT CCTTCAAAAA TTAAATGTA TACTTATTTC
CTAAGAATTC GTTTGGCTCA CACAATTGTG AAAAGATAGA TGTACACCAG TGTTCATTAC AACAAATTATG CAACAAATCT
ATTATGTGCC AGACATTATT CGGAACCTCTG GGAATACATA AGTGAACAAA GCAGATTCTT GATCTCAGGA CCTGGGGTCA
GGGTCAGGA GAAGCCAAAA AACACGCTNG AGAAATACIT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT
GGGATGTGA AATCTTGTGT

SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCACG GAGGTGGGTT CGACCTCCCG TTCCCCCACC ATGACAATGA GCTGGCACAG TCGGAGGCCT ACTTTGAAAA
CGACTGCTGG GTCAGGTACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAGTCA CTAAAAAACT
TCATCACCAT TAAAGATGCC TTGAAAAAGC ACTCAGCAGC GCAGTTGCGG CTGGCCTTCC TCATGCACTC GTGGAAGGAC
ACCTTGACT ACTCCAGCAA CACCATGGAG TCAGCGCTTC AATATGAGAA GTTCTTGAAT GAGTTTTTCT TTAAATGTGA
AAGATATCCT TCGCG

SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAATTAT TAAAAAGAGG CCACTTAAAT TCAACTCTCC ATGGATACAG TGTCTGTGGC AATGTTAAT TAGAGATTAA
AATTGAGGAA TTGAATAATT GAGGTGCTA ATGAATTTGA AACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTTCCGACT
TAGCTTTTCT TTCTCTAACC CTTTCTCAT TTCTACTAT TATCACAINT CTGGCCTTGA CTGCTGAGTT TATTACTACC
CATAACCTG GCCTAAGTGG AAACAAAAA GCTGTAGCCT CTTTGTGAG CTCTGGAGA CATTGGTCT ATTGGATTAA
TGACATGTT AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAAATG AGATATGNTG GGCCACCACG CTTTCTGT

SEQ ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCACT GGACAAATG AGGAAAACAG GTGAACAAGC TTTTCTGTA TTTACATACA AAGTCAGATC
AGTTATGGGA CAATAGTATT GAATAGATT CAGCTTTATC CTGGAGTAAC TGGCATGTGA GCAAACGTG TTGGCGTGGG
GGTGGAGGGG TGAGGTGGGC GCTAAGCTTT TTTAAGATT TTNCAGGTAC CCTCACTAA AGGCACCGAA GCTTAAAGTA
GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGGCCT GATCCTTTCC CTGTTCCCTG TGTATTCCCT GTCTGTGGCA
AAGCCCATG CCTTGATTCT CTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTTCTGC AGTTTATTTA ATTTACTGGC
AAAATGACGT ATTTTTTTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG
TTTTCAAGAA ATGACTGATA TAAATCATGT GTTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT
GTTCAAATTC TGTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAGTGC ATTATGACTT T

SEQ ID NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTTTATTG GTAAACTCA GAAACTAACA ATTCACATCC TCCCACCTTC TTCTTTCCGA AGAAGGCAGT
TTGCAGAGAC AAAAGGGCTG TGGCGTGGG ATCATCCACC ATCTCCAGT TTTACACCA GGCTACCCAT GGCTTGGCAG
TCAGGCCTCT AGGCTGATTG CTCTCAGAG CAATAGAA

157

SEQ ID NO:290: (Length of Sequence = 353 Nucleotides)

GGTTTTCATC TTCGGTTTAC AAAAGTCCTA CTATTTATTT ATTTTAACTT TAATTTAAAT ATCACCCTACC TTAGGTAGAA
 GTTTTCCTTT GTGTAATATA ATATAAAACC GACATTTCTT GGGGGCATAA TAGTAAAGAT GTTAACATTT TTTGGTTCTT
 TTTGGATGCT GTATTTGTGC TTCTTCTGAA AGTGATGTTT GCCAAGATGG CTCATGTAAC CCAGTTTTGA CTAGGCTATT
 GATATTCTGT CTGGTTAATT TATTGAACTG GCTTAAAGCT ATACATATTT CCTTTTAGNTGTAA GATATTCTAG
 ATATATTGGT CTACTGATTC ATAATATCAC TGG

SEQ ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CTGCTACACA GTCTTGCAAC GNCCTCGTG CTGCGGCTTC TGCGGTGAGG CAGGGGAGTC TGCTTGCTTT
 AGATGTTGGT GGTGCAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT
 GAG

SEQ ID NO:292: (Length of Sequence = 397 Nucleotides)

ACGGGAAGGT GAGTATGTNA GTATGINTGC CAGACAATGG TGTTCOCATG TCAATGGAGG TTTCTCAGAG AGAGGTGATC
 TGCTGGAGA AAGCTTAATC TGGTGGCAAT GGACAGGTGA CTTTAAGAAG TGGGAACGA GGAAGGAGG CCAGTTTGAA
 AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACA GAGCAGCTGC AGGTAGAAGA TGGAGACAGA
 ACTNGGGAGA TCTGGTGGAG GTAAGCCGCG TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTACCA
 AAGCCAGGGG NAACCTAAG AGAAAACACT TAGAATTTN GGAGAANAGG CTAGGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGTAAAAT TTACATACAG TGAAATCCAA ATCTTAAGTG TACCACTAGA TAAATTTTGA TAAATGCATT ATGCCTGGTC
 TTCACACACC CTTTTCAATA TATAGAAAAT NTCCAGATAA TTTATTTTGT TGTMTTTTTC ACACACTAAG TTCTAGACTT
 TTCCAGGTCC GAGGGAACATA TTAGGGGGGA AAGTACTTGT NATAGTAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG
 CAGAAACACA TCGCAGATTT AAGGTCTGCA ATCTCTGCTT TTTGTTATTG TTCCAGTTTT GATCTCAGTG ACATTACAAG
 CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEQ ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTTCAG GNTTCAACCG TTTTATTTGGG AGGTTTGTGT TCTGTGAAA TACACTAGAG GGTGGGGAAG GGGACACATT
 CACTTTGCAA GATAAGGGTT TCCCACCACT AAAGGAAAGG CATGGGGCAG GGCACACTGG GGTTTGGGTC CGTTTTCCCA
 CCTCCTTCIG CTGCGCTCAC TTTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAAA CAGCAATCA
 ACCTCCAACG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGGCTGGGG CAGCTCACTC
 G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCCTCCGGCC COGCACAGGG GGCATGTCCA GAGGTGCTGT GTGTACCAA CTGGTCTTCT AATTGGAAG
 GAGTTGGAAG GGCCTTTTGT TTGATGAAAA GTTGGAACA GTGGCACATA TCTNAGAGGG AGGAACGAGG CAGCGTGGTG
 AAGCG

SEQ ID NO:296: (Length of Sequence = 315 Nucleotides)

CGAATACAGG TAGTGCCAG CTGGTTGGGC TGGCCAGGA AAATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC
 ACAGCTAAGG CTGTGTTGGA GCCCAITCAG AGCACCAGTC TAATTGGGAC TTTAACCAGG ACATCTGACA GTGAGGTTCC

158

AGATGTGGAA TCTCGTGAAG ACTTAATTAA AAATCACTAC ATGGCAAGNA TAGTGGAACT TACGTCTCAG TTGCAGCTGG
CTGACAGTAA CTCAGTGCAT TTTTATGCCG AGTGCCGAGC ACTGTCTAAA AGACTNGCCT TGGCTGNAAA GTCTA

SEQ ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCTNAAGC TTGAINATCG RATTGCCAAT CINCATATTT GTGTTAGAAT CATTTGTTTT TGTCCTTCA
TGTTTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGTAACTTAA ATGTATTAAG GCAATAAATG
TAATTTTCCA CTNAAAACIA TCATTATAGA TTTGGTFACT ACCTACTGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTTACACA CAAGTGATTT TGAAACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT
ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAAT GAAAATTATA AAAGTATCAN GA

SEQ ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGTTTTT AATGTCATCA CAGTTGTCT CAAAATGAGT GGTGGCATCA TATGTGCGGG AAATAAAGAT CTGGCTTTCT
GTCCCAAGT CTTTTGTAC CAGGAGTCA CTGATGCTAA CAAATTTCTG TTCAATTGGT TCCAAGAGCT CCAAGCTGG
TCTGATTTCC TTCTCAGGCT CTTGGTTTC CACAGTTGTA CTAATATAG CAATGTACTT CCCTTGCTCT GCTACATTGT
GCGCAAAGGA GATCATGCAG ACGTAGATAT CTGACTTTCC ATTGACTTTG GTTCTGTGGA ATAATGATCT GGCAGGAGTT
GGCATCATTG GTGTTCTTTG ATGGGGGTGG CTGAGGGATG CAAATAACCT CTTG

SEQ ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCGGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT
GGCTTCCTGC TGACTCCGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCA
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTTGCATGCC ATGAAGAAGC TGGCCAGCT CATCAACGAG CGGAAGGGTA
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG
CTCAGAACTC ATCTACTCGG GGGGAGCTGA CCTCGGGTGA CACAG

SEQ ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATTCAAA CAAATAGCCT GAGAATTING GGGGATCTG AAATAGAGTA CTATGCTATG TTGGCTAAAA CTGGTGTCCA
TCACTACAGT GGCAATANTA TTGAACTGGG CACAGCATGC GGAAAATACT ACAGAGTGTG CACACTGGCT ATCATTGATC
CAGGTGACTC TGACATCATT AGAAGCATGC CAGANCAGAC TGGTGAAAAG TAAACCTTTT CACG

SEQ ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTTTCACTC TTGTTGCCCA GGCTGGAGTG CAATGGCGTG ATCTCGGCTC ASTGCAATCK GCACCTTCCG GKTTCAGCG
ATTCTCCTGC CTCAGCCTCC CAAGTAGTTG GGATTACAGG CATGCGCCAC CATGCCCGGC CAATTTTKTA TTTTCTGTAC
ACACAGGGTT TCTCCATGTT GGTGAGGCTG GTCTCAAACCT CCCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAAATTTA ATGCTTCTTT CAAGNCTATT AGAAACCTTT
AATTGCTTCT TAAGTTTCTC CCCCAACTAT GGAGGAAGCA TAT

SEQ ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA AAAAAAAG GCAGGGGTG CAATCCATCT CTCTGATAAA ACAGACTTTA
AACCAACAAR RRTCAAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

CCTAAATATA TATGCACCCA ATACAGGAGC AACTAGATTG ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG
CTCCCACACA TTA

SEQ ID NO:304: (Length of Sequence = 416 Nucleotides)

TTTTTTTGGAG ATGGAGTACT CGCTCTCTTG CCGGGGCTGG AGTGCASTGG CGCGATCTCG GCTCACCTGC AACCCCTGCC
TCCCCAGTTC AAGAGGTTCCT CTGCGCTCAG CCTCCCGGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGCTGCTT
TCTTGATATT TTAGTGGAGA CGTGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG
CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCAC CGTGCCCAAG CTGTTTTTTA ACTGACTTTG GATTTTACTC
CCTTTCTATG CAAATTTATT TTAGAATCTG TTCCTTAACC TTAGGGGGTT GGGTTAGACA AGTTTCAAGG GAGCCTCAAG
TGKAAATTGC TTAAGG

SEQ ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTTTTGT ATTTTATAGTA GAGACGGGGT TTCACCATGT TGGCTTGGCT GGTCACGAAC TCCTGGCCTT
GAGTGATCCC CTGCGCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GTCAGCGTGC CCAGCCCAGA TTTTATGTGT
TTAATTACAA ATTTTACGTT AACTGATTCT GCACATTTAT ATTTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GTTTTGCCAC ATTTGGCCAGG CTGGTCTCGA ACTCCCGACC VVGIGAGCCA CCTGCCTTGG CCTCTCAAAG TGCTGGGATT
ACAGSGGTGA GCACCACGCC CGACCCATAG CTCCTTACAA CTGCCTTGTA AAGAAAGCAT CATTTGGCAC TGTATAGTATT
TCTCTTGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTTGGTAC AGAGTATGTC AGGAAGACAA CTCAGATTGC CATTTTAAAT AAGTTGTAC ATGAACAATA ATTGGAATCA
TCAGGTAATT TTTTAAACA AAGGTTCTTC ATTTACTGTT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGTSCATA
GGCTAATTAA AAAATAAAAC CTGGCCGGG CGCGGTGGCT TACGCCTATA ATCCAGCAC TTTGGGAGGC CGAGACGGGC
AGATCAQNG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGGTGAAACC CCATCTGTAC TTG

SEQ ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAA CATACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCTCA TAANCCCCAC TGGGGAGTCT GGGGGCCTCT ATTGCCATGT GCCTGGGAATN ATNATATGCT CATCACTTTA
TGAAGAATAA AATTGTGNTT TCCTGCCTTA AAGTTACATT CGTTCTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT
GTTGCGAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCCTGTACC ACCTCTTCCT GAATACGGAG GAAAAGTTCG TTATGGACTG ATCCCTGAGG AATCTCTCCA GTTCTTTAT
CCTAAACTG GTGTACAGG ACCCTATGTA CTGGAACTG GGCTTATCTT GTACGCTTTA TCCAAAGAAA TATATGTGAT
TAGCGCAGAG ACCTTCACTG CCTATCAGT ACTAGGTGTA ATGGTCTATG GAATTAAAA ATATGGTCCC TTTGTTGCAG
ACTTTGCTGA TAACTCAAT GAGCAAAAAC TTGCCCAACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

160

TGCAATTGGA TACGGAGAAG GTCACAACAG GCACTGTTTT CCAGGAAGCG CCATTTACCG TTTTTMATGG GACAAAGGGA
GTTACATTGG CTATGGCTTT TGGGAAG

SEQ ID NO:311: (Length of Sequence = 489 Nucleotides)

TCGACTCGGT CCTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG
GGGGGCGGCA CCGGGTCCCG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CCTMTCCGTC CACCAGCTGG
TGGAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCCTGAA GCTGACCACC
CCCACCTAGC GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TCGGCTTYCC GGGCCAGCTG
AACGAGACCT GGCAAAGTGG CGGTTGACAT GGTGCCTTTC CTGGGTGAAT TTTTAATGCC CGGTTTGGGC CCTACCAGCC
GGGGAAGCA

SEQ ID NO:313: (Length of Sequence = 302 Nucleotides)

CTTCTCATGC CAGTCTAATG ATTGTTTTTA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTTTAC
GGTGTCCAAC TGCTAAGATT TATTTCCAAC TTGTCAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAGGCT
GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTCAGAGGC AACCATATAC ACACAAATAA
TGTAATACT AAATTCATG AAGTAGCTGT CCAGGGAATA CTTTCCAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATGTGAA AAATAATGAA TATTAATTTG GAGCATAATA TTTAAATACA TGAAAAAGC TGGCTGGGAA
ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTTTGTAGAG NGCACTCTGA GTGTAAAGTTT ACTAGACTGA
CATTACTAAA ATCATTGGTG CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCTTAAAA
CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGGNATTA ACAGTGTACA CCACATGTGC
GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAG TGGTG GTGCTGTCT GATGCTTCC AGTGGGCCCC GACCAGTCTT GGACAATGCC TGGCGCCCGT CCCCCGCCCC
TCCTCTACAC ACACGCAAGA NTTCCGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG
GAATGAAAAG GGAAAGTGA GGAACGGGGA GCCAAACCCA GGAAGACGCC TCTTTTCTTG CACATTCCCT CTCCTTTATA
TACTCAGCTC TTGGCTGTCT CCAGTATGTA CCCACCTTGG TCCTCCAAGC TGGGAGCCAC TTTTATAAC ACAATCACAG
TTTCACAAAC CCAGGAAGG TTCCATGTGG NGAGAGGTTA AGTTTCGNCC TTGTCCGGGG AATTATGACA CTCAGAATAT
CCCCTTTGGT GTAAATGGAA GACAACCTTT

SEQ ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCTTG GAGGGCAGNC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGCGTGAGAG
ATCTGAGGCA TCTCGGGGGC AGGGGAGGGC TGGGAAGGCA GGCTGGCTNG GACCCCTCGCA TCTTAACCTA ACCTTGACCC
TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGCTCAC
CCAAAAACAG AAGAGTGAGG CTTCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCG

SEQ ID NO:318: (Length of Sequence = 407 Nucleotides)

CTCGCCCCGC ACCTTCCCCG CCTATGCCCC TGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCCG GCCACGGAC
CCTCAACTTC TCCAGCCGCT CCACCCACGC TTCTGGACC GCCTCCTGCA GGCGAGGCTC ACATCCAGCA CTGTCCCTTA

161

CAGTCGCCAT GCCCCTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTTGCCTCAT AGGGTGCCATG
 TGCCAGINTT GATAAAGTGC TGGCCACAGG CCTTGCCTTC CCAGGGCTCA CAACACTGTG TCCCTGACAC ACCCGTGGGC
 TGTAGTGATT CTNTTCATGG GGATTTGACT ATAACCGCA GTCAGGAATG AATTTCACAN CATAGCTCAG TACATACACA
 CATATCT

SEQ ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CTGCGGTGG GGACAGGACA TGACTAAGCA CAGAGCTTTC TTCTTTTGGAG GCCACGCATG TGGTGACAGAG
 OGGGACCACC TGCATCCACA CAGCCCGGCG CACCTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC
 TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTTCCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT
 TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCCAGGCC CAGGTGACAC CTNTCCCTG CCTGNCCTGT ACTGNCCTGCC
 TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAGA CAGGACTTCA TCTTCACCAT CT

SEQ ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCCGGGGC ATGGACAGCC CCCGGGGTGN CCGCCCGCNC CCCCTCGCC GCGTCGGGTG CNGTTCACCA GGCAGCACCT
 GGACAGCTCC AGAGTCGGGG AAGCGCCATG GTTCTTGCGC AGAAAGGATG CCGGTGGGG CCGGCAGATC CTGCCAGGAC
 TAGGGGCTT CCCTTTCCAT CAGGAGCCTG CAAGAGAAAC AAGAAAACAT TAGAGGGGCT TCTGTGTAGG GGGAGGGCAA
 GTTGAAGTCTA TCTTTCTCT TGTAGGTACT AATTAAACAC CTGCTGINTG CCTGGTACTN TGCAGGGTGG GACAGGCATC
 ATAGCAACTC ACAGTGGTCC CCTCTTCTTT GTGCCCATAG TCTAGTAG

SEQ ID NO:321: (Length of Sequence = 355 Nucleotides)

GGTGGACTGT GCTGTGAAC TGAGCTGAAC TGGGATCAGG AGAAGGAGAA GTGGGGATTG AGCCCTCAC CTCCACACAC
 TCCTCTCTGT GCCTGAAATT CCTCCATTAA GCAGCATCGC TGTCCTCTGT AAACACCCAC ATTAAGCCAT TATTCTCTT
 ATGGCTTNA TAGGCGTTAG TCCCTCAGAT CCTTTCCTGC TGAAAGCGGA TCCTGATAGA GAGAAGGGAA GAGAGATGGA
 TGGNTCTGG GACGGCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGTCTC TGGACTCTN GGGNAAGAAA TATTTTCTGG
 GGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCCAGGCAG CTCCATCTTT CCAATCCANT CCCATTATCC CAATCTCTAC
 CCCAGGATCC CCCAACTCC TCCCACTTCA CCTCTGCCAC AGACCCGCTC GCCCCCAAAC TTCAGCCINC CCTCATCTGC
 CCTNACCACC CACAGCCCT CCTACCTAGC CCTCTCCGCG GACGGGCGCG CGGGCTCCCC ACATT

SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTCGCTCC TGTCGGTAC CTTCAGATG CAGGTGACAG CCTGCCCTTC CGTTTTINTC TTTCAGTCC GCCTGCGCG
 ATTGGGTTC AGCCCTGCCC ACACGCGCGG TACATCCGCG CTACACTCAC CGATGTGCGC TAGCAACCG GCTGCGCGCC
 AGCATCCGCA ACCGAGTCC CCGCGCTCCA GTTCTCTGGN GGGGAGGGAG AGGGGTGTTG CTTCTCCAGC CCCCTGCAGC
 CTGGTGTCTT

SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GTNTTCTTAT GCGGATAAAA TTTCTNAGGT AAGAAAAGTT AGCTCTGAGC AGCCCTCCGC CTGATACTAA TACTTTACCA
 ATGGAGATTT TCCTTTTCTT TTCTGTTTTT GAGACAGGGT CTCACTTTGT TTCCAGGCT GGAGTGAGT GGTGCCATCA
 TGGATCACTG CAGCCTCCAT TTCCCTGGCT CAAGCCATCC TCCACCTCA GCCTCCCGAG TAGCTGGGAC TACAAGGTGT

162

GCACCACCAC GACTGGCTAA TTTTAAATTT TTNNNTAGAG ACGGGGGTTT CCTATGTTG CCCAGGCTGG CTTGAATTCC
TGGGCTTCAA GTGATCCT

SEQ ID NO:325: (Length of Sequence = 461 Nucleotides)

ACTCCAGACT CCTCCAGCTG TCATGGATCC TGGGCCAGGG GATCCCGNAC TCACCCAAAG TGGGGCTTTG GGCGGTGGTG
GGCCGGTTCA GTGGTGAGC GTCTTTTGT CCAGCTCAGA ACCTGCTGCC GSTCCGGTCC CAGAAAAGTT TCTAGCGGCT
GTAGTTGCCA AAATTAGGCT CTGTACTGC TGGGCTGGCG GTGGGCGCCT CATCCAGCC TTGGAAATCC TTGCCTAGTA
GCGGAAGTT CTAAACAGCA AAGGATACAA GGCCCTTGA GCGCAAGTAA ATTTCCCTC TTGCAGCAAC AGGTGTCTC
CAAACCAAGC AGCGTCCAGC TGTGTGCGT GGCTGGAGTT CTGCAGTNGG GTGTGGGGAT TGGGAAGGTG CACAGGCAGC
CGCTTGAGAC CCAGAGGCAG TTTGGGGGAG AGGCTTGGG CTCAGAGGCC TTTCTTTGT T

SEQ ID NO:326: (Length of Sequence = 391 Nucleotides)

GGCCCTCCAG TGTCTGCAG AGAGGCACTC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACITT
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCAG ATAAGTACC CCTCAAAAGC
CCCCAGGACG GCAAAATCAA AGGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAATTT GCGCTACTCC
CACTGCCCTG AAGCAGCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTTA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT
TGCTAATCAG TAACAAATA TCCCTCTAA CCCAGTCTG CCTTGAACCC ACAGGCTCAG GATGGTAAAT A

SEQ ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCTGG GATTCCAGC CGAGACGTT CTGCTCCATT CCGGCAGGAG CTACCTTCCC GAGCCGCGCT
TTGCTACCT GTAGGAG TAGAGGAAA TAAGACAGC CTCTTAGGA TGGTGAGTG GCTAGAAAGA AGCAATCCAC
GCCAAAGGCT TAGCTCAGT CCTAGACTTA GTAAATGCTC AATAATGTC TGCCATTGTT ATTATTATTT ATNATGCTTC
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGAGAC CTCGGTTAAA TCTTAGCGC CATCTTTATT
TTTAGGATGG AGTAACTTGC TCAGSACCTA CATCTAATC TGTGGAGGGG ATGCGGTTT TAAGTAGGAA TTCTINGACT
AGACCTCTCA GCAACCCCTT CCINTCCGTG ACAGTGGG

SEQ ID NO:328: (Length of Sequence = 400 Nucleotides)

TTGCCCTCTC GGCTAGAAAG TCTCCCATTA TGGTGCTGTG TCTGCTGGGA CCCACGGGCG GCTGCACAGG GAACCATGTG
GCCGTGAACC TCAAGTCCNG NCCAGCAGGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCTTT
ATAGATCATC CATTAAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAAATATTA GCCAGCTAC CCTGCTGGGC
TGCTCTCTT AGAAATGAGG AAGTGGAGGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAAGAT
TTGAATCAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCCTCCT CTANTGGGTG TGCNTCCCTA CCGGCCCTGG

SEQ ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGCT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGGG
GCGGGTAGGG GTGGGTGATG TTCTTGGCT TGGGGGAGT TACAAGGTA CAGTGGGGCT TGTGAAGGG CAAAGTTCT
GTAAGTNGT CCNACAGGC CAAAGAAACC CCAGAGCGT CTTTCGACTG ACTACAGCCT GGAAGAG

SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGTTC AGAGGGACAA CAAAGGCAGT TAGACTGTCC TGAACGGTCC TGCCTCAGGC TGAAATTTTT
GTAGCACTTG ATCAGTTGCA AAGTATCTT CCTTTAATA TCTATTTA TCATTGGTA TCTGAAGAGG AAGTGAATT
GGGGTAAGAA TTTAGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCCCTA AAGAAACTC

163

TAAGGATTTT AAGGAGAGTC AAACCTCTACA TTCATCCAGG CAAACATCTA CTCTTCCATT GATTAAATGNN TCCACTCATC
CGTGCAACAC ATTCACTCTT TCATCCATCC ATTCATCCAT CTATCCINCA TCAATCCATC CATGTATCTT TCATTATCC
A

SEQ ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCAACGTTG CCCCGCCTTT GTCTCCAGCG GACTGGAAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC CCGCACTCTT
ATTGGCTAGG TTCCCGACT TCCGCTCTCG GTTGGTGGT GGCTTTGCCT GTTACCTGTG TTGCCACTA CCACTGCTC
CGCCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCCGGT GTTCGGAGC GCTGCGGCA AAGCAGACCG CCTTGCGCT
ATTATGGGTT GAGTGGCTCT GACTCTAGA TCGGCTCTGT CACTTACTAA TGGGCGGTGT TGCTTCGCG ACTGCAGGTT
TT

SEQ ID NO:332: (Length of Sequence = 441 Nucleotides)

GGCTCAAGNA ACCTGCACTC TTGCACTCTG GCCTTCTCCC AGGCTGAGCT TTATCATATC ATCAGCAGCA ACCTGGAGAA
AATGTCAAC CCAAAGGGTG AAGAAAAGCC ATCTATGTAC TGAACCCGGG ACTAGAAGGA AAATAAATGA TCTATATGTT
GTGTGGATT CTTCTGGCG TGTGTCTTC ATTCAAAAAG CATTTATTGA GTGGCACCTA TGTCAGCCT GAAGATGAAT
GTGTGGGAA GGGGTGGTG TCACAAAGAC AAAGATGACT TAGATGCCCA CTGTAATCTT GACTGTGAGA AAGAGGGGAT
TCAGGCCCTT TCTCATCCAG TAGTCAATGT GCCATCTCCC CTTCCTAGT CACCTCTAT CTTCCTTAC CTCTTTCTT
CTCTGCTTA TGTGTTTCC ATCTAAGGCA AAAAGGGGG G

SEQ ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCGTAG ACCGAGTAGC TTGAGCGCT CTTCGGTGA CTTTTCCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCTC
GCTCAGGCAC AGAGNCCGA CACGAGCGG CGGCTTCCCC GGGATCGAGG GACGCGCAG CCAGAGGAGA CGAAAGGAAC
CCGGTCCGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGGCCCTAG TGAGTNGGA TTNGCGGG TTCCGGGGT
CGACGCGGA CTTGGCGAC CCTCACTCA CCGCTCTC TTTCNCAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG
TNGTTCAGT TCCTAAGTAA GTCCCCAGG CCAT

SEQ ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCGCTCC GCACCCGCT TTCCGAGCA GGCTACACT CTCCCTGGG CATCTTACT GGAAAGCCGG CAGNGGNG
GGAGAAGTGA GCNCGTCTC CGGCTCTCT CGGCTGAGCG GGGGATGGCT CCGAGGGGAG ACACTCAGGA
AACCACCTCC GCCCTTCCCC CATCTTTATC CAGCG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TCCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCCGCTGC TGGGGGCCCC TGGNAATNTA
AGTCTGCCC CGGGCTGTG CGCCCTCTC CCTGANAGCC CCTGCNTCC TGGGCACAGG GAAGCCTCCA TAGGCTAGTA
GCATCACAGT GCCAGGCCCA GAGCTTACTG GACTTCCCA GGTCTTATG GACTAGGGCT GAGGGTACAC ATCTGCTTT
TTTCCAGAAT ATAAGTTTT G

SEQ ID NO:336: (Length of Sequence = 191 Nucleotides)

CGAAAAGCG CTTGGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGGNCG GGACTCGAAG GCCCACGNA GNCGGACTAA
GTCGTCCAAG GAGCGCCTT CGGCTACAA GGAACGNCC AAGGCTACC GGGAGGACAA GACCGAGCCT AAGGCTACA
GGCGGGGCG GTCCNTCAGC CCACTGGGAG G

164

SEQ ID NO:337: (Length of Sequence = 279 Nucleotides)

CCCTAGGGCT CCTCCTGACT CCTTCCAACCT CCCAAGTCTG CAGCCCAAGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTTC
 AGGAAACCAG GNGGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAACA CACACACGNC
 TCACAAAACCT TCTGAATGTC GCTCTGTC TCCTTCTCC AGTCACCGAA AGACCTCGGC CTGAATTGGA GCCCGCAGCC
 GTAGCTGTCC CTNTCCACCT GTNGCCCTCG CGGAGGCTT

SEQ ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNCGTGG AGGGAGGCAA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACAAACCAGA TCTCTTGTRA
 ACTGAGAAGT CCGTTATCAC CAAGGGGAGG GTGCTAGACC ATTCTAGAGG GTTCGCTTC CATGGGCCAA TCCCTCCCA
 CCAGGCCAC CTCCAACACT GGAAATAAC TCCAGCAGG CCCGCTCCA GCACTGGAAA TAATGCTTCA GCGTGAGACT
 GGAAGGGGAC TGATGGAGCC TGGWTGTTT TCCCGCCCA GSTCMAAGC TGAACCGTAA TCCCCAATGC TGGAGGCGGG
 GCCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACCGGGC TGTCCTNGT CCAGCTAGCC TCACAGGGAG TGGCCTCTAA AACNGGCGG CCCACNCCAT TTGGAAGCTG
 TCCCGGGTTT TCCGTGAAGT CCTCCCGGC TGTTGTCTCC TGGATGGTCT GGACCAACAG CTGGGGATG AGGGGAGGCT
 CGGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGGTN TGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG
 TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CCTTACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT
 GAGGTGATC CAAT

SEQ ID NO:340: (Length of Sequence = 450 Nucleotides)

GGCCCCACAA TCCCTTCTG GCTCCGGGA CGGGCGGGC GGGCGAGCG GGCGGAAATA ATTTTNTGTT TGGTCTCTC
 TGCCCCAGTC CCTTCGCGC GGGACGGCA GACGGGAGAA GTTGGGGAA GCGGGAAGCA GGAGCGGGAG CGCCCGGCC
 TGGCAGCAT AGGGCGCGG AGAGGGCAG AGCAGGGATT GAGCACCTAC TGINTGCCTT CACGCTTAC AAAAGGATTT
 TCGTTGATG TTCACTACAG CCCTGCCC GGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGATT TCGGAGAGGT
 GAAGTCACTC GCGGAAAGTC GCACCGCCAG GTCTGCGTG ACACCTTAA GCAGTGTTC GTTACCCCGG GGAGAGCGCG
 ATGAACCTGA ACCACTTGT GGTGTGTT CTGCTCTTC TGTTTTTTT

SEQ ID NO:341: (Length of Sequence = 192 Nucleotides)

TTCAAACCT GCGGCACGG CTGTCCCTC GAGGCCCGC CCTTCCCT TCCGAGAGC CCACCGCTGG GTCTTAAAGC
 CCACCGCTGG GTCTTAAAGC CCGCCGGTN TTACCCAGG ACGGGCTG GGAACCCNG TCTTCTTAG CTCTGGNTT
 ACTTCTGGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GTGGTAACCT TTTTAAAAA CATAAATACC ATACAATCA TCCTTTTAA GTGTGAATT CAGTGGTTTT TGGTATATTC
 AGTGTTGCAC AGTCATACC ACTAATCCA GAATATTTT ATCAGCCCA CGGCTGTATC TCCATTTCT CTCTCCCKG
 CAGATCTGG CAACCGCTGA TCTACTTCT GTCTCTTACA GACTTATCTG TTCTGGACAT TTCACATAA

SEQ ID NO:343: (Length of Sequence = 229 Nucleotides)

165

TGCTCCAGGA AATTGGAGTT CNAGCTGAAG GCCTTGCGNC ACTCOGNGCA CTCTAGGGC TTCTNGCCCG TGTGGTGG
 TCGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT
 CTCTGGTGG TGGATGAGCT GCGAGTNCGC GCGGAAGGCC TTNCCGCACT NCCTGCAAGC GTAGGGCTT

SEQ ID NO:344: (Length of Sequence = 227 Nucleotides)

TCGSCAGATC ANATTACCCC TTGCCAGAGG TCAGGSCCCC CGGCTTGGC GGCGGGCCAG AAGCGTGAAT TGGCCTCTG
 GAATGCATGC CCTTAAACAT CTCTAGACTA GGGGCGTGT CCGCAACCA TGGAGGCCCT CCATCACCAT CCTGCGAGCA
 TCACCACCT CCAACCCCCA TGTCCCACCC TGGGNTTCC ATACCTGTAG TAAGAGAGCA AACCATT

SEQ ID NO:345: (Length of Sequence = 249 Nucleotides)

GGCAATGTT GTCACAGATG TGTGCAGATT TTSCAGAGGA CATAAGTTGG CTGTGAGGWA GAACACAGAG GTTSCCTATT
 TTTTAGGCAG GAAAGAAAGC CTGCACTTTT CTGTGTGTGT GTNTCAATAA ATCTGAATAA CACCTTGAAA GGGTTAAAAA
 GCTGAGCACC AGGTGTTTTT TTTCCACTTT CCAGAGTAAT TTAAGCACAC NSCAAAGTTA TCTCCCTTCC TTCCCCACGA
 GCCAGCTTA

SEQ ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCTAGTCCC GCAGCCGCTG CAGCCGCTGG GTTGGCGGAA GAGCTGGACG CCGAGCTAGA GGAAGAGGCA GAGCTGGACA
 CAGTGGCGGC GTGAATTGGC CACTNCTTTC GGAGCCCGAN CTCTCCCGCA CTGGAGAGGA CTTCTTCTTG GCTGGGCGGC
 TCTTGGTTCC GCTCCCGCTC TGCTGCTGCT GGCGGCATTT NGCGCGGCGG TTCTTGAACC AGACCTGCAG TGGGCGGAT
 GGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTTNTTGC TCCACCGNCC CGTGGACCCA ACTCCCGGTC CAGAATATCG
 CAATCCTTTC TCACCGAGGC CTTGACCCCT TCCTGT

SEQ ID NO:347: (Length of Sequence = 155 Nucleotides)

GCCGCGGTGC GTCGGATGCC CAGCTCGCGT CCAGACCCGC GGGATGCAGA CCCGTTTCAG TCAGGCTTGA GGGCTGCTCC
 GCATAGACCA ACGTCCGGGG AAGGCACACA GTGGCCGAGG GCCCGCGCGC TTKGGCTACG GCTGTATATG TATCT

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTCCGATT TAACTGATTG TCTCATCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC
 TAGAGAGCAC TTGGATTTIN AATTTTCTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCTNCTGTTA CACAAGGCCT
 GTNCTCTCTT TACATCTTCA GACTTAAAT CTGTAGAAGG TAACAGCTTT GTATTAGGA CAGAAGCTTA GTGGTCACAA
 ACAAAAAATA AACTGAAAT ACAATTCGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACCTAT TACANINACT
 AATAATTTGG GCAATGAGAT TCCNGGTGN TTCAACTTTT TG

SEQ ID NO:349: (Length of Sequence = 342 Nucleotides)

AATTCCTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTCAAGTAT CACAATGTTT ATTGATAGAT ACAAGTATAT
 AAAATCAGGG CATGANCATG ACTTGATAAA TTAAGTAGAC TTAATTTCAA TACTATAATA GNGGGACCA ATTCAAATTC
 TCACCATTTG TTTACACCC ACAAAAACCA CTTCAAGGCG ATTAACGNTC TCTCAAACT GNTCAGTTTT GTGCAAGTAA
 ACCATGTTTT TTTTAAAAAG ACTTGTGCAC TTGCCAGGC TCAAGTTTAT TAAATCTAG GCACATAAAG NCCATTACTA
 GAGGTAGGAA ATACAGGCAA TT

166

SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCTGTGCT AGCTGTGAGG CAGCTCTGGA ACGTGAAGAG CTGTTTGTTT TGAACCGTGA ACAAACCTGT GTTTTGAGTT
 TAGCTGACAT TAAAGAAAAA AGTTTCATCAC GTGACTGTTA ATGTAAACCT GGTATTATAA ATAACTATTT AAAACAGGAG
 AAATCTGGTA AGTTGTITAGG NITCTAAATT CCTTTTAGTC TGTTCACTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA
 AAGAGATTTC ATTTCTTTCT AATCACTTTG GCTTCTNTCT NTTTTINITAA GTAGGTAAAA ACCTTCCTTG GTGGGCACT
 AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGTGAAGGC TTAAATCTA AGGA

SEQ ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTGGGCCAG GGCTCCTCTT
 GTGGCCATGT ACCCAGGGCT GGCTGGCTG CCAATTGCCT CTCCCAGGAG ACAGCCGTTT TTCTGCAACC ACACCCCGTG
 CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCTAAT GGGATATCGG
 TGATCACTGG TCCACCTTC CTGTCAGGC TTTCTGGGG GCTGCTCTTG GAAATGAAGT CTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAAATTACCC ATGGTCAAT CTAGCCTACA AAGAAGAGAA AATACAGTGA TTCAAGTTTC ATTGTATTCC TCTCATTGAT
 ATATTTATCA ACCTTCAAT TGAAGGAAGT GTCTTCTAGG CCTTTACAAA GAATGTAACC AGGGTTTAGG TATACAAGTT
 GCATATGATA AATCTGTCAT GTTCTATAT AAATCTGTCC ATATTCCTCT TCTGAAATGC ATTATTTTTTG GGGGAAATTA
 AAATGTGATG CAAAGATCCT TATACTTTGT

SEQ ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTTATATGA AATGNCCAGA ACAGGGAAAA CCTATTINAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TNATTGCTTC ACGGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG
 GTGCCTACAC AACTTTNTGG NTGTAATAA TGCCG

SEQ ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAATTTT TTATTTTTGT AGAGATGGAG TCTCCCAATG TTGCCCAGGC TGGTCTTAAA CTCTAGGCT CAAGGGATCC
 TCCCAGCTGG GCTTCCCAA GTGCTGGGAT GATAGGCATG AACCACCAT CCCAGCCCAT TTCTTTTTTC CCTTTGCACA
 GTACCAGATA TATGGTTGGT ACTGCAGAAA TAATTTCCCC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTC
 GTCTAGCCAC TTATTTATGA TTGTACAAA ACATTCCGCT TTCTGAGGTA GACAGTGATA TTCTGAAGCC ATCAGTAAGA
 GTAATTTTTC AGTNTGTG AAAGTGGNCA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEQ ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGAACATCT CACTCTGATA GATTGAATT TCTATTCTT GCTCTGTGAC AAAACCTGA
 GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTCTA CCTGGAATG GCTATAGTGG TGTGAGCTG CTGTGAGATG
 ATTTACTGCA ATTTGTCACT TTTTGAACCT GTTCCAAAAT AGTCTGCTGA CAGCCCTTCC CTTATGAAA ACATCTCTCC
 TTTTCCAGTT AAAAAACAG TCAAAAACA CAAAAAAGG CCACCTCC

SEQ ID NO:356: (Length of Sequence = 401 Nucleotides)

167

GGAAATTAGG TTGGTTATTA ACATGTATAG ATGGAACTGG GGTGAAAAAA AAAAGGAAAT GGGAAATGGAG TGGAAAGGGTT
GGGTGGGAGA GACACTTCAC AGTATTCITT TTGTTTGGAC TTGGGAAATG TTAATATTTT ATAACTTAA AAAAATGCAA
AAAAAAATA TCAAACTAG GTAGGAAGGA GAACAAAATG AAATATAACC AGAAAGGAAT AANCTTACA CATTTTGAGT
GAATCACAAA GCCAAACCA AAAAGAGCTA ATTTAAGTCA CTTTAAACT TGGTGTAA CTACCTACAC TCAGTCTAAA
AACGNAAT AAGGGTAAAG AAATAGTGA ACTCTAGTTA GTGGGCTCT TTCTTTACAG CAGTATGGG ATGGCAACCT
G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTGG ATAATAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAAGATC ATTTCTTTTT
GTCCTGTAA CCTAGCATTC CTCTAGGCT TCCTCTCTT TAATGAACC ACAGCTTAGC TCATGTATTC TTTTATTAAC
ACCTGCTCT CATGTCCATA AGATTCAGGA ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN
AAAAATAAG NCTAAATCA GGGGAAGATG TATTT

SEQ ID NO:358: (Length of Sequence = 314 Nucleotides)

GTGAAGGAAG TATGAAACT GAGACTAATA TTATGAAGTC TTTTITTAAT TCCTTATCTT ATTGCCCAT TTTAACCCTT
TGGTGTTTGA AATGGAAAAT AAATATNCTC TFCGCGATAG ATAATATGTC AATAACCAA AGGTGGCTT AACCAATAAT
TGGCCCACT TTAATTTATT ACCTAAAGA TATATAAATT ANCTAATCTA AAATTAATG CAATTTGCT ATGACTTAA
GTGTCANTAA TCCTGTATAA GNGATCCNNT TTATGCAGTC ACTTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEQ ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAAACAAT GGAAATGCCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC
GACAAATCA ACTGTGGATC CAGAGACGAA AAAATGTTCT GTAGTGCAA GGTAATCTGG TGAGATGAAA AAAAAAGAAC
CATTTTAGA AAAANGGAAT ATTAGAAATA TIGAAGTAA TATCATAAGT CATTCTATTA CAAAGGCATT AACTCTTCC
TATCAATAGA ATGTACCAGT TAAAAATTT TTAGTAGGAA TATATCTTT ATTTTATTA CAGAAATCAN GGGACAAAGA
GGATTGATC CATCCATACT TCCTACTCTT ATTGGGTTTG TCAAAATGTA GG

SEQ ID NO:360: (Length of Sequence = 395 Nucleotides)

GCATCTTTT GATACCCACC TAATAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGTG AGTNCCTATT
TCATCAAGA CAGAGCTTAC CTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTCTG AAAGCAGTTT GTCAAGTGT
TTCAAGTAA TCAAAAGATC GGTAAATCAA TTCCTTAGCG AATTGGATTA GACACTCTCA TTCAAATGG CAGTTTATG
CTTACTCATT GTCTGAATA ANCTTAAATA CTTTATGCTA TCTTCTGCT CCAITATTTA TGTAATCACT GGGNCCTTAG
TATCTGCTT TAGNCAATAT AAAATCACTT NCAGGTATTT TCCATCAGG ACACAGAGGC AGGCACAAAT TAACC

SEQ ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTTTTTGT GGGGAGAACA TTAAGACCA TTTCAATGTC ATGATGAAAG CTAATGGGAG AAGGCTTTT TNCIACAAA
ATTTCITTA TTTTINCAAC TTATTGAGG TTATAATTGA TATTAAAAA CTGTACAGAT TTAATGTGTA CAGTCTAATG
AGTTGGGACA TATGCTTACA CCCNTGATGC TGTTACCACA GGCAAGGTAA TACACATATC CGTCACCTGC AAGAGTTTCT
GTGTTCCCN NTGTTTCTCA TTTTGNTTTT TTCAAAAT TACTTTATAG GGTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

168

ATGCTGGAAG TGATTTCTGC AGCTCAGGAT TTTTTTTTAA AGCTACATTG AAAATATAGG TTTATTTTTT GTNCAGGTTT
 TNCITTTATA TTTTTTINCT GCACAAAGGA GGAGGATTTT CCACTTACTC ATATCGAGGC CAGATTTTTA AAGCCAGCTA
 AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAAA AAGGTGGGGT GGCCTTTCAT GTAATGGGAC
 ACGATGCCCT TCTTGCTGAA CGACTGGAAA GAGCACAAGG AGCACITTTT CTTCTCCACT GCCCGCCGGA GTTCTCGCT
 CAGCTGAGGG GAGTCGTCTT TGGGCGGGGA TGGGATGATC ACTTTGTTGG GCTTNTCGCT GATGGTCTG GAGGCTGCCA
 AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

SEQ ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTTGAAG TAAGCTTTCC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG
 TTATGCAATT TATTTAAATC TGCACTGCCA ATCTTTTTTT GATGGGTGTG CTTAGACCAC ACATTTAAGA TAATTATTAA
 TATGTTAGAA CCGAATATAT TTTNATGATT AGTTTTTATG TGTCAATTG ACTGAATTAA GAGATGCCCA GACAGGTGGT
 TAAACATTA TTNCITGGTA TGTITGTGAG GATGTTTCCA GAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG
 ATAAAGATAA TACTTGTCTAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCATAGA ACAAAGGT GGAGGGAGAG
 TGAATTATGT CTACCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCC

SEQ ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTGTGTAA ATACACTTTA TTTTCCATTT TNCCTGCTG GCGACATGT GAACAGGCAG TGTGCAAAAT GGTGGCGGGC
 AGTGTAGGGG GCGTGTGGAG AGCCCCGTGG GTGCTGCCC CGGTCCCGAG GCTTCGTAACT ACTGAAAAGT GGGCAGCTAG
 GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGAGATTN CTGTGAACGC TACTCTACTG GAGGCTCCGG
 GAGCACCGAG NGGGGCAGTC CCCAGGTCA TGAGGCCCGG GG

SEQ ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCTGCT CAGCCTCCCA AGTAGCTGGG ATTTACGAC CTTGCCACCAC GCCCAGCTGA TTTTGTATT
 TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCGGGCTGG TCTTGAATC CTGACCTCAA ATGATCCGCC TGCCCTCAGCC
 TCTTAAAGTG CTGGGATTAT AGGCATGAGC CACACANCT GGNCTTTTTN TTCTGTTCT AACTGTCCC TTTTATTTCC
 CTATGGAGCA TCTACTGAGC CCCAGCCGAG AGTAGAAACA AACCTGCTGG CTGCTCTNAA GGCATTATA GTCCAGTTA
 GGGGNGACG GGTCACTTAA CCACCTAGT

SEQ ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG
 CTTTTACTAT TGACAAAAGC CGGGGTCAA AAAAGTAGTT TAAGTCTTAA GNCCTGAATAT GCATTAAAGT ATGCAGGTAG
 CAAAGATGTA ATAAATTTCC TTAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CCNGTCATTG TAATTGACCC
 NCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGTTTTT TAAAAACCAT
 TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

SEQ ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAACAAAC CTTTAAGTAC AGTAGTCCA AAACACACTG CTAAAGTTAT GAAATAATTG TGGATCAITT
 CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGGCATATAT ATATATNCNC CTTAGATTCC AGCAGAAAGA
 CTAGTTTAA GTAGTAACAT GCACGTGAA GTATTCTACA TTTTCAGTCA CTTAAACTTT CCTCTCTCAG ATGGCTACAA
 CTTTTTAATA TTCGAGGTNT ATTTTATATC TAAGTAAAG GATTCCAGAA TACTCTGCC CTGCAAAACA GTAGTGTTTT

AGAAGNCTCT NGGAAGTGT GCTGTTTACC CTTTAGCAAA GNGNTACAAG AGCTATTAGT TGTAAATAA C

SEQ ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTTCCTTC TGCACCTGGT TCTCTGCTC CCCATTTACA TGGTTTACTT CATTTTCTC TTCATCCATT GGATTCACAT
GTGTTCTAGG CCAATATTCC AGGNGTGTG GAGTAAAAG TCCTCTTAA TTCAATTTTG GNTCTGACCC ATCAGGGCTG
CTGAAACCAG CATCTTTTGC AGAAACCCAG GCAGCAAAC AATCACTTC ATCCAAAGTA ATAGTTAACA TCCTGTTTT
TAAGTCTACT GAGAACCAAT TTGGCACATA CACCAITTTA AATCTTNTCT TAATTTATC TTCAAATCC ACTTTGCCA
GATCTTCAAC TTTACATGGC TTCAATACAT CCAATATGN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGTATT CTTTAGAAGT TTTTGTGTTA CTTATGTTTT NCTCTTTTAC ATCTCCTTGT GAATTTCTGT CCCATTTGA
AGTCTCTCCT TGTCTCGAC CAAGATCCCC TTGATGTTCT GTAGCCAAAG ACTGAGAAA AGAGTTATTC TGAATGATGT
AGAGGTTGAT AAGTCTGGTA AGAACTGTT GGACATACTC CAAGCAGCAC TGCATTGCAG TCTTTTGGGC TGTCTTCCTA
CTCGGGGTTG CTGTCCCCTG AGTGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTG ATGCT

SEQ ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTTTTA CACTGCTGGC CTAATTTGTA GATATCTCA AGAAGATTAT GAGTCATTCT CACTACCGGA ATCTGTTCT
CTATTTTNTT TACCAATGGG TGCACCATG AATGTTGGCC ATCAAATAGC AAATACCCCT TGCTGTATT TCCTACTININ
GTTTTAACTG GAGCCTCAGC TGAAAAGGTT TATGGTGTG CTATTCAGTT TTATGAACCA TACTCTGAGG AGAATCTCAC
AGAAAAGCAG AGACTTCTTT TGGGTTTAA ATCAGCAGAT GGAAGTCTG ATAGTTCCAA AACAATTCAT ACTAACAAAT
GCATCTGTCT TCTTTCTCAC TGGGCTTTTT TTGATGGCA TTCAGGAAGT TTCTGACTTT TNCGTATCG TTAATTCAT
CTCTGGGGCT CATGTCTTC CAATTGAGGA GGATAATTCC CA

SEQ ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGGTCT ATTTACCAT ACCCCAAAGT AAAGGCCCAA ACTCCACCGG GGCCAAGTNT TTCTGGNTCA
AAGTCACCAT GTCCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCTTGGNTCC CTCTCTCTCT GTGCAGGAGT
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTG TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA
TCACCTAAGG GAGGTGGTTC CAGGCTTCA TCTCCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGAATT T

SEQ ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGTATTGT TGTACTGGG AGGTGAAGG GAACACAAAT TCAGTTATAA GTCTTTTTTG AATACTAAGA GGGGAATAAT
TAGGGAAGCT AAGAGGGGAA TAATTAGGAG AAGAAAAAA AACTTCAAAC AATTTTCCCT GTACATGAT TTACTTGCA
TTTATAAACT GATTTTTTTT TCTAAGCACT CCTTTGATAA TGATTAAAGT TGGGGTACA TTATTNAGG GTGTTCTAAT
ATTTAAGGTG ACTTAAAAAC CTCACACAG TTAATCCGA ACTGTGAAAA TTTCTCATCT TATCATCCCT CTGTTACTAT
CAATTTTCT CACGGTACAG ATTCTTTTAT AATTACTTCA TT

SEQ ID NO:373: (Length of Sequence = 306 Nucleotides)

ATCTTTTGTG CGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTTTTC TGTGGAGTTG AGTTTCTTTG TAAATTCTGG
ATATTAGTTT CTGTAGAT GAATAGTTT TGAATATGTT CTCCCATTC ACAGGTGCTC TCTCATCTCT GTTGATTGTT
TCCNTGATG TGCAAAAAC TTNACTTTA ATATAGTTCT ATTTGTTTAA TTCTGTTTTT CTACCCATG CTCTGAGAT

170

CTTAGCCATA AAATGTTTGC CTAGAACAAT GCCCTGGAGT GTTCCCTG AGTTTCTTC TGGTAG

SEQ ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTGGT TGAGGTTTCT AACTCATTAT CCAAGATATT TNCITTCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC
ACCCTTTGTA TCCAGGATGA TCTCTTNTG AAATCCCTGA TTTAATTATA TCTGCATGAC CCTTNNCCCA ACTAAGGTTA
TATCCACAST TACCGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAAGTTCT
ACTACATCCC ATTGCCCAAT ACTTCTTACA TGATGACA

SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGTA TTTTTGTGG TTTCTGTAGC TCCAGCCCT CAGAAGGGAC GCTACAGTT GGCAGCTATG GCTGTACCCC
TCAGTCATTG CCCAAGTCC AGCATCCCTC CCATGAACTG CTCAAGGAAA ATGGCTTCAC ACAACACGTC TACCATAAGT
ATCGTAGGCG CTGCCTTAAT GSTAAGAAST GTGGGGGGCA GGAGATGAGC CTCTGGGGCC GTTATTTAGA CCCAGAGTAT
AAGAGTTGGG GGATACGGGG ATAGGTGACT CTTTCTCTG ACTTCAGAGC AAAAAAAGA CATGACATTA TAGCAAGAAA
G

SEQ ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAAAATTA CAGCATGACT ACATATGTTA GGAAAAAAT ATCTAAAAATC AATTAACTAA GCTTCCATCT TAGGAACTA
AAAAAGAAG AGCAAAATTA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTTCTTTG AATCAATTAA TAAATTTGAT AAGCCTCTAG
CCAGACTAAG AAAAAAGAGG TAGGGCACA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCTACAG ATCCCATGGA
TATTAAAGG ATAATAA

SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GTTACAATTG AGAAACATA TTTAATAAAT CATTTGCAAT TTTNATAATG TTTCAAGCCC ATTCTTTGTT GATAGCCTCC
ACATTATAT GGTAAAGTCA TTGTGCTGT GTTCTTACC TATGACATTA TTTNATATC CCTTCATTG TGGATCTTAA
GATGTTGCAG AAGGTTCAAT CCTGTACCCC AATACAGATT CACTTCCTTT AGCTGCCTTT NCTAGCACCA ATATGCTTTA
AAAAAAATG CGCAACAAC AAGCAGTGAC AGCGGCCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA
AAGGTGTGTG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTT CTTTCTGAGG CATTCCTCC
ATCCCCCTAA CCCGATACA TGCATTAGGA ATGTAGCAA ACCCTCGGG GAACC

SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCACG GGTGTTTATT ACTGGACATG CTCTATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA
ACTATATGCC CAATGCTAAT AGTGGGTATT TATTGGTAAC ACTCTTTATC AGGTGCTATG ATTGTTGATG GCTTTATTIN
CINCITCATA TTTNCTATAA TTNCTACAAT GAACATGTAT GTATAATCAG ACAAAGAGC CAAGAAATAT CCATAAGTTT
TNTGGTTCAT TCATTTCATCC CATAAATACT TGCTGAGCAC CTGCTGTAAAG CCAGGCTCCG AGCCGGCTGC TGGGTGGAGT
GCCGCACCCC AGGGAACGGT CAGCCCTCG

SEQ ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTTTGAATC ATATTTTACT TATAGTTTG CTGTATATAC TGATTAAACT TCTGAACCTA AAGATTCTCT ATAATTAAAC
TAGCACAAAT ATAATCTGTC CCTTACCCAC ATTGTAAGAA TGCTGGTGG GGGAAATCCA ATATTGACCT TCACATTCCA
CATGGAAAAT CTTTGTCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTTGTG AGTCTCAAGT TTGTCCCCA
ACAAGCAGC ATCAGCAACT GGAAATTTGT CAGACATGCA AATTATCCAG TCCCACCTGA GACTTCAGCC CAGATCTATG

GATCAAAAAT TTTGGGGGTG ACCCTGGGCA ATATGGGCTT TAATAAGNCC CTAGGATGGG TTCTGATGCA TGCTCCAAAT
TTGNGGATCA TTGNINCTNT G

SEQ ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTTTNAGAT GGAGTCTCAC TCTGTGCCCC AGGCTGGAGT GCAGTGCCAT GATCTGGGCT CACTGCAACC TCCACCTCCC
AGGTTCAAGC AATCCTTCTG CCTCAGCTTC CCCAGTAGCT GGGATTACAG GCACCTGGCT AATTTTTTTT TTTTTTTTTT
TTTTGAGATG AAGTCTTGCT CAGTGGCCAG GNTGGAGTGC AGTGGTGTGA TCCTGACTCA CTGCAGCCTC TGCCTTCCGT
GTTCAAGCGA TCCTCTGCC TCAGCCTCCT GAGTAGCTGG GACTACAGGC ATGCACTACC ACACTTAGCT A

SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCTGTGAA CATATATTTT NATTTATCTT AAATACCTAA GAGTGAAATT NTGGTTTCAT ATGTGGGTAT ATATTCAACT
TTGTAGAAT CTACCAAAAT GATTTTCCAA GTATATGTAT AATGTTATGG TCATCAGANC TACATGATAG TTAGAGTTGG
TTAACAATCT CACTGCAATG GATTGACTTT CCTGTGATTC AGCTATCCCA CTCTTAGGCG TATACCCAAG AGAAACTCAT
AATGTCCTTG TGTCAGCTT GTATGCTAAT GATTTTAGTA GTATTTTTTG TAATAGCCAN AAGGTGGAAA CANTGAAAAC
TTTCAAGGAA ATGATTAAAT AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANTGAAGTG
GTATACAAGA AACACCACAG GTTAACCTT GAAAGTATAT TA

SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTTT GGAGCCANTC CCATGTGAGT TTGAGTCTCA GAGTGACTCT GGGCAAGTNA CTTAGGCTTT CTGAGACTCA
CTTTCCTCCT TTATAAATCA GGAAGAATAA TCCATTGCTC ATTGAGTTGT TAATNAGACA TAAATGAGAT AGTGTATCTA
AAATGTGATT TGTTAAGTCT AATACGNAAT AGATGCCAT TTGAGTGTTC CTNATACTCA GGATGGTTCT TGGGATATAT
TINCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGT TCAGCCACAT TAGGGCTCTT ATGGCCTGAC
CTGAAGACCT ACCATTT

SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GTGAAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTGCTTTTTC TTAGGTTTCAC AAGAAATGCG CCGGTGGGGA
ATGAACINNT TCATTAAATAA AACCTAATTT GTCTTGATCC ATTCCACTCT ATAATAAAAC AAAAGATTTT NTAGGCAACT
CGGAATATAG CTCTTTTGAA AGTACTCGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACGACA TAATCTTGAT
CINTTAATTT GIAAATATIG ACANTINCT TTCTGCACAT TTTAATCTTA GTTTCCTTT TGATTTTINCT GAAGGTGCCA
AATTCATTT AACTINCTTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGGTG GGGCAGGGG ACCNCGGANG
TAGTTTAATT TTCGGAAAGG G

SEQ ID NO:384: (Length of Sequence = 420 Nucleotides)

GGACTCCGTT CCAAGAATA AGTTTTGCTT GGGCGGAAAG TATGTGGTTC ATCCGAAAAA AAAGAAATCA ATGATTTGTG
GCAGTCTTC ATGTGCTTTT GGGCATTINC ATATCTTCCT TGGAGAAATA TCAATTAAGA TCCATTGCCG TATATACATA
TATTAAAAAT ATGGGTCATG TATTATGGCT CATACCTGTA ATCCCAATGC TTTTGGATGT TGAGGCGGGA GNTACCTG
AGGTTAGGAG TTCGAGACCA GCCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGTTAGC CAGGCATGGT
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTCCAGT
GAGCTNAGGA TTGTGCCACT

SEQ ID NO:385: (Length of Sequence = 404 Nucleotides)

172

GTGACAAATG TTAAGAAATT GTGTGTCAAG CAAAATACCT TAGAGGCCAA TGGGCCACAT GTTTTAAATA TCAAGAGATT
 ACACACAAAA TTNTTTTTCT AGCTTCTTTT GAAAAATCAG AATTGGGAAG ATGTATTTCAT GAGTGACTGC TGCCCCCTTT
 GGTGGGACT CGTTCCTTCA GGTTCATTAC ATGTCATCA ATAACCATT CTGTGGTCCC TGCTTTTGTG TTGTCTGGNC
 TCTAAGCATT TGAATTTTGA GTATTATAAG AAACTTAACT ACTTCTCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT
 ACTACGCTT ATTAAAAGCN TTTTATCAAT AGCCNCCATT TTGGAGGGGG GGATTTCAC TGGTGCCCTG ACTAGCAAGG
 AATT

SEQ ID NO:386: (Length of Sequence = 267 Nucleotides)

GTCTTGTTGA CATTACGTG GTATCTTAG AGCAACACA GAGTGGTTC ATAAGCTGCA GTGTTTGTAGT ATCGGTGGGA
 CTGTGGCATG GGTAGAGGA GTACAGTCG CAACTGATG GCCAGCTCT GACCTCCAG GCAAGTGGAC TCCGAGGAGT
 ACCAGCAGAT CTTCCCAT CATGCTGGGGA GGGCTCTGGG GAGAGTCAGT GGGCAGGAGA GGGTCAGCTG TGCAGGCTCC
 AGGGCCAGC CCGTGCCTT CCGCTCT

SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTTTAAATG ACATTTTATT TAGGCCAGGG GACCAGGTAA CATTATTTTT AGGAGGAGAG CAAAAGGTGT TATATTACTG
 CTTCTAATTA CCTAGAAGGA AAGCATTTC TACACTGCCA TTATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC
 TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAAA
 AACACTGGAT ACAGTTAGTT TCTGTTGACA GTTTCAGAAG AAAATCCAC AGATTGGACA GGCTGCCCTG TGAAAGGTTT
 GTCCTACAC ACAGCATGCC CTGAACCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGA TTTTACCACC TGTTGTGTAAG TCTGGGTGTA TAACTTTACC GTAAATCACC
 TAGAACACAG GCTAGCCGAA TGGGGTGTG TGGTATGGCA ATATCCCGAG AGCTAACCTG GGGCTGGGGC AATGTTCTGT
 GGCTGCTGCA CTGCTCTTA ACAGGCCAGT TTAAAACGTC CAGCTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC
 TCACAGTAGC TCAAGACCCG GCCCAGCCTC CATCCCCAGC CTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTCCG
 TCTTGGCTGA GTGGACAGCC CCTT

SEQ ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACCTGCCC CAGCAGTGCA TGCAGGAAGA CTTCCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG
 AGCGGGAGAA TGCAGCCAG CTAAGAAAGT GCGGGGAAAC GCGGGGGNG CTGCAGTATC GGCCCTCAG GCGACT

SEQ ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTGCT CTGTACCCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CGGCTCCCG GTTCAAGTG
 ATTCTCTGC CTCAGCCTCC CGAGTAGCTG AGATTACAGG CAGTGCCAC CAGGCTGGC TAATTTGTGA TTTTCAGTAG
 AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAAT CTGACCTCA GATGACCCG CTGCTCAGC CTCCCAAAGT
 TCTGGATTGA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTATCCGCT GGCTGGCTCT TCCGAGTTG
 AATTGTGTA CTTCTTCCC TATCTGAGGC CCAGTTTTTC TTCA

SEQ ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCCA TCTGGAGCG CTGCTGTAAG GACACTGGCT GCAGCAGGG AGGCACAGCC
 AGGCTGCGC ACTAGGCAGA GCTGGTGTG GAGCCAGGAG CAGATGAGAG CCCCCTTTC TACCAAGTTG GCAGTGAGAG
 AGGCCGCACT CCGGGTGCT GATGCCGAGT TCAGCTCCAG ACCCTGGCAT CCTGGGCTN TCAGGGGCCC AGGAAGCCCC

CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCTG GGGCAGAGCA
AAGCT

SEQ ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TTCTCTAGTC AGGATGCACT AAGCACCTAA TGAGTAAACA AACTTCAGCA
TATCCTCATT GTTCTCATGG TATTAATTIG AAGATACTTA CCTTCGAACCT AAATCTGGTT TTAGAAGAGC TGCTTGTTGT
TCAGCTCCAA CTGGTGGGA TACAGGCTGT AAACAGTACA GACATAAAAC TTGCTATGAT AACAGTAAAA TTCAAGCTAA
ATATACAATT TGTACTATT CAGAAAACAC GATAGTTTIG GTTACCTTGC AAACCTGGTA GGAATATCTA TGTATTGAA
TGTCGTATC AATCCTATTA TTAACATTAT TACCAAGGT AAATAAAATT T

SEQ ID NO:393: (Length of Sequence = 404 Nucleotides)

CCMTTATGTA GCTTCTCTGA GGTGAAACCA CTTCTTTTIG ACCATCTAGC GCANTCINTC TTTACATCAA CCATTTATTT
CAAGTGTAGT GTCCTTCAGA GTCTGAAAGA GCTATTGCAG AATTGGCTGT TGTGGCTTTC TATGGACATT CACATGAAAC
CTGTACAAA CAGTCCCTCTA GAGACAACCT TGGGTGGATC CATGAACCTT GTGTCTAAAC TGATCCACTA TGTAGGGTGG
CTATCCACTA CTGCAATGCG CTTGGAGAGC AACATACTT TCTTGTCTGA CTTTATTTTIG GATTTCTATG AGAAGGTGTG
TGACATATAT ATAAATNATA ACCTTCCATT AGTGGGTATT GTTCTCTCT GGGGATCCTT CTATTCTGCA CTCTCAGCC
TGGG

SEQ ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGGTGAATGG CTGCTGTTAG AAGCCCTGGA
GACAGCCTGA GGTGAGAGCC CAGCCCCACT CTTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACIA GGACTTGGTT
TCGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAAATA TATATAGCTT GAATAAAGTG CCCAGCTTGT GGGTAGCTGC
TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA
TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCAGTTTA AGGANGAACA CAACTCTCTT CATTTATAGC GNCCTCCAT
CAGTGAGTAG ACGCTT

SEQ ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGTCTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT
GAGTGAGGNC AACTGAAATA ATTATGATAC AATTAAGGGT GGTAGGTTAC ATTTGTATAG TTCTTTAAAA TATGCATTAT
TCCACATGAT CAGAAATATA AAANGANCTA GACAGATACT GGTAGAGAGA CAATTAAATT AAATTGTGTA CATATTGCTT
GGNGCAAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTTAG TAAGA

SEQ ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTTCT CACGTIAGGG TGCTTCTTC CCGGCAGAG TTTTTCGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC
TAGAAAAGTC ACTCCAAGCA AAGTTTCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGCGGGG CTCACGAGGC
CGGAAGAACT CCGCACAAT GCTGCTCCCA CTCTGCGGA GGTTCOCAGA GCAGGTCCGA GTCTCCCTCT TTCACAGGCC
GCACCTCCGT GGGCTGCTTC GGCTCCTCAT CCTGAGCGC TTCAACGAGA CCATCGGCCT CCAGCACATT AAGGTGTACC
TCTTCGACAA CAGGGINATC TTGAGCGGTG CAAACCTGAG TGACTCCTAC TTTNACCAAC CGTCAGACCG NTACGTGTTT
CTGCAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

174

ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCTGAGC TGCCATTTTC TCATGGTAAA AGASAGATAC TAGAGGAACC
 TGCCCTCAGAG GATTGTTCATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACCTGG AACTAAGGGA
 AAGCCCCGAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAAGA GCGCAGGCAA CCCTTGAGTT GAGCTCAAGC
 CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC
 TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT
 CCTATGCAC TGGG

SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA
 AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTTA ACACCTAGCA CAGACGTATA CCTCCAGGNT CCTAGCTGCA
 TTTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCTCTTA
 TGTAGATTTT TATTTATTTT TGAGGGCAAC CCAACTTCCA GGCTCTTGGG AGGAAATAGA CTGCAGCCCC TAAGTGTGAT
 CAATACTTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAACATAA ATGTACACTT TTACATTTTT

SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTTAC AATTTTACAC CTTCAGGAAG GCTCCAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC
 TTCTCTTCAA AAACAGGAAT ACATTCAATT TTTCTCACTG TGTGAATCAA GTAATTATAC AAATAACAT CTGAAACATT
 TTCTTTTAA ATATATTTAT ATAATATATA TTINTAACAG CTTTACAAAT AAAGGCAACG GTCTTTTCTT AATTTTCATG
 CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATCCAG GNTATTTTT TNCTCTCTAT GGTACTTTGT ATTTCACTTT
 ACTT

SEQ ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCTG AGTTTTGTTT GAGCATCTTT CAACATGTAC CATATTTATG ACAATTCTCT TCCATAGGAT CTATCTGTNC
 TGCAACAAGT ATTGATCTTA CAGTAAATTT TTTCACAAT TCATTAGATT CTATGTCTCT TTTTCTGTTA GGAATTTTTG
 TGCAGGTAGC TATCTCTTGC CCTAGATTAT TCTCCTTGTT TAGTGTCTGA TTCTTAACT GGCTCTAGA TTTCCAGATT
 TCTTCCGGTA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCTTTG AGATTAATCT TCTTTTGAAA TGTCTGCTG
 CTCTACTCTT GTATGTCTTG GNCCACGTT CAAGCTTCCC ATCTAGCAAA ACCAGGGTTT CTAATATT

SEQ ID NO:401: (Length of Sequence = 339 Nucleotides)

GTTTATGCT CAAAAACAAG AATTCAGAAG CAAAGGTGGA GAGACTGTGG GTTGGGGAGA TGGCAGGAAG GGGCAAGGC
 CTGTGCCCAG CTCTCCCCIT TGCTCTCTT CTGACCCCTC TGGCCGGAGT CAGGCCTAGG GCCAGGGCAT CTGGGAGGGG
 GGCACCTTCG TGGCCAAGGG AACAGTAGAG CTATCGGGG CAGTCTTGA GGGGTGCCCT GGCAGGAGG GGCTGCAAGA
 TTINCAGGA GGCAGAGTTC CCTTCCAGA ATCCAAAAGC CGGTAGGGCG GGGGGCAAGG CCCCCTGTTT GGCAACTNAG
 AAGAGGCGGC TTTTGGCG

SEQ ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCCAGTGT ATGAGGACGT CCCAGCGAGA AATGAAAGGT TCTATGTTTA TGAAATATAA AAGGAAGCAT TGCAAGCTGT
 CAAGATGATC AAAGGGTCCC GATTTAAAGC TTTTCTTACC AGAGAAGACG CTGAGAAATT TGCTAGAGGA ATTTGTGATT
 ATTTCCCTTC TCCAAGCAAA ACGTCTTAC CACTGTCTCC TATGAAACA GCTCCACTCT TTAGCAATGA CAGGTTGAAA
 GATGGTTTGT GCTTGTGGA ATCAGAAACA GTCAACAAAG AGCGAGCGAA CAGTTACAAA AATCCCCGCA CGCAGGACCT
 CACCGCCAAG CTTTCGGAAA AGCTGTNGAG GAAAGGGAGG AGGAGGACAN CTTTCTGAC CTATCTGGG AGCAACCCCC

SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTTGACTGC TCTGATATGG AGAGACCTGT TAGTCTTGTA TATAGTGCCC AGCCGGAAAA AGCATCTCTT GAAGGTTAGG
GCATTTTGTG AGGAGAGCTC TAGGGCTATA TCAGTCTGGA GGTATGATCT CTGATAAAGA TCATAATTCT CATCTCAGTA
ATCTTCTTTA GAACAAAACA TTCTTCATTG TAAGCTTCTC ATTAAGTGAA GGCCACCTGA TCTGAGATTT TGGCTCTTAG
AATACTCTTT NCTGTGTCIC AATCCTCATA TGGCTTACCT CTGAAATATA GAATATATTT CCTTGTGTAG CCTGGTAGAG
TTGGGTTTGT TTTTGTTTTT CAAACAGTAA CTTTATTG ATGTGAAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG
TCTTAAGGTT GATTTT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCTNACTC ATTGTGATGA GTAGGGCGGA GGGCTTCACT GCCTCANTTT CCCCAACTTT GGACCTTAAA TCCTCTCCTG
ATGCCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTATA CAGATGCAGG ACACACAGCC TTGTCTCAG
ACCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTCGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG
TGTGTGCTGA GGGGTGGTGG GGGTGGGTGG TGCTGGGTGG CTGGCCTGGG AATACTTTTC TTAAGCTAAG GCTGGGGCTT
AGGGGAGGGC CAGAGGAAGG GTAAATAGTT TGCTGGGGG GGTGCTGG

SEQ ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGTCCT CACTCTTACC ACAAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT
ACAAAGATTG TCTGCAGACA AAACCAGCTA GCCAAGGTT CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA
AATATGTACC CGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCAT
TGAACAATCT TTATAAAGGT TTCTTCATGT TATTTACAAT TCAAAGTAAA TTTACTTTAT AAGCAGCTAG GGAATTCTT
TATTTAGTAA TGTCTTACA TAAAGTTTC ACATAACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTGG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTTAA TCTAAATTTT ATCTTAATTT TTATTTTAT TTCAATGTCT AAATTTTAT CTAAATTTT TNCTAGCTCT
TTATTACACC AAGACAGCTT CACATTTTAA TTTATATATT GTACATCTCA TGTAAAGNAT TACCGTATAT AAGCTAGTGT
CATAACTTAA GTAGCCACAT TCATTCAGTA TGTTTTATGT TTTCTCTCTG ACTGGATCTC TGATACATTC TTTCTGTTC
TAGCTGCTTT TATGCAAAAG GGCATTATAT GTTTGTCAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGTAA
TATATAATCC NGTGGCCTGT TTCATTGCG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGTGTATAT TTAGTATCTT TNAITAAGAA GACTGGTTGA TATTGCTT CAGCTAATTT ATAGAAAGGA TGATCATCAA
TGTCTCTAGT TTTCTCTTAA GTGGCTGTG TGTGCAGGTA CATATAAAAA TNCAACTATA CAAATAGCTG GACAGTTGAG
TCTCAACTAT GAAAATCTTT TCTGGGATCA AGATCTAAGA AGTGGGTGTG TGTATGAGTG CAACCCATCA TTCTATCCCC
TAAAAATCTG GGGTTTCTCA GCCCAAACAT TCNCACTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCTT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCTC
CAATCTTTGC AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTG AGAGGGAGTT TGINCCTTTT TTTTCTCAT
TATACTCTTA AATTGTTGTC AGTTATCAAA CAAACAAACA GANAATTTGT TTGGAAAAAC CTTGCATACG CCTTTTCTTA
TCAAGTGCTT TAAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

176

SEQ ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNTCATTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACAC TGCAGCCTTG AACTCCTGGA
 CTCAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCACGCTA ATTTCTAAAT
 TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAACCT CCTGGGCTCA AGTGATCCTC CTT

SEQ ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC
 ATGGCAGTAG AACAAATTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA
 CAGTTCACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC
 TAGAAAGGTG TCGTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAAGA CCATTAACCTT AAAGTGGTGT TAAATGCTTT GTAAAGCTGA GATCTAAATG GGGACAAGGC AGGTGGAGGG
 GAGGCCAGTG TACATGTAAA TGCCACAGC CCAGCAATGG GTTCCCTCC CAAGGNCCTC GCACCAACCT CTGAGCCCAA
 GACCTTGCTT GAAAACAAGC AGATACCGAT TGNCTCATCC TATTTATGGA CATGTAGGTC TAGTTGCATT TTCACTNGGG
 GGAGGGGGGA AGGTGAATTA TGGTAACTTT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGTGCGCA CTATCACGCC CGGATAATTT TTTTGTGTTT TAGTAGAGAC GGGGTTTCAA CATGCTGCTC AGGCTGGTCT
 CAACTACCGA CCTCGTGATC CGTCCACCGC GGCTCCCAA AGTGTGCGGA TCACAGGCGT GAGCACCTCT CCTGGNCACA
 GGINGAGACC CTTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACA GAGAATGCTA ACAACGGGGG AAAGCACAGA
 CACAAACCTG

SEQ ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGGAAGGC AATCACAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTG TCTTCGGGGG
 AACCAATGCC ACCNCTCTC ATCCCCCAGA CGGGCGAGGG GCTGCACCTT TAAAGCAGGC CATTGGGCTT TCCGGGCTCC
 AGGGCCAGCC CACCCCGNTC CCGCTGGTGG ATCTTCTGCT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNTCACA
 CTCAGTGCAG CTGTAGGGCC GNTCACCCGT NTGGATGCGC TGGTNCAGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC
 CACAAGTAAC CACAGAT

SEQ ID NO:414: (Length of Sequence = 304 Nucleotides)

GGTTAAGAA CTGCGTTTGT GNGCCCAATC TTGGTGAAA AATATTTTGT GGTCACTCTT GAAAAAATC CTTTTCAAGG
 CAGACAGCAT TTTAATGCTT TGTCTGTTTT TCCCTGTTTG TCAGCTCTGN CACCAGCCTG AAAGATTTAA AAATNCAAT
 TAATGGAGGN TTATTTGTCC TMTACTCAGG TCACATTCTT GGGTTTAAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT
 TTAGCTGCAG TTTCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGAGTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CGTTGTGGAG TGGGTGTCTT TGGATAGAAG GAGTGAGGAA CTGGGGGAGG AAGGCTGGG GGATCCCTTG GCGGGGCTAC
 TTCTGGGGC CGGATGGAC ACCTGGNAGC TGCTGCTNTT GTTGGGGTCC TGGCAGGGT GTGGTGTGGC CCTCACCCT
 CTGNTCACCT GCTCCTCTCT NACAGTGCTT GGAGAAGTTC CCTGTNATCC AGCACTTTCA AAGTTGGGNA GCTNCTGGC
 CATCCATCCT GTCACGTGGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNACANT TCCTGTGCTT GCCTT

177

SEQ ID NO:416: (Length of Sequence = 343 Nucleotides)

GTATTTCAG TGTTTTATTT GCTTCTGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCAGGCAG AATCCGGCAT
 ATCCTTCTCC GCCTGGGGGG CCCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA
 GAAGCCACAC TGAGCCTGGA GGGACCGGGC CCTCCTTCGG CGGCAGAAAA CACAGTCACC TTINGCAGGG AAGGGTTTTT
 NCCTAGAAAG AATTTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCAGAACC AAGCCGGTGC TNCCTGGGC
 AANCAGAGAG TGAACCTGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAGGGG GAAATAAAA GGAATAAAAT AAAAACGGCA CAGTTGACAC ACAAAAAAA ACCAATGATG
 GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGNTC CCATTACAGC AGCAGGATCC AGTACCCCGG GATGCTCACA
 TCTNCCCIN ACGTGGGCGG TGTAGCCCCCT TCTCCCAAG GT

SEQ ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAATTGG CTGCAGAGCT GTCTTCAGGA TCATAGGCCA CTGCCAGAGT CTTGGAGAGA GGGAGAGATG GAGAGGAAGG
 GAGTGAGCTT CGTGGTCTG ATTCTGGCT CAACGACGCA GGAACCTCAG GTTCAAAAGC AGCTGACAAG AGCCCAGAGA
 CCGTCTTCTT GCGTCCGGC AGAGCCTTCT GGTGGCCCGA CACCCAGGCA NGGAGGGAAG GCCCTGAAAT CCGTTTTTIN
 TGGCAAGATT NGTTCCAAG AGGAGATAAT GGCTCAATTT TGTCTCCCA AGTTGATCA

SEQ ID NO:419: (Length of Sequence = 223 Nucleotides)

ATTGTTGGGA AGGTAAACATT TTCCATGGT TTINATTTIN CCCAAAAGTA TTTATGTATT GATTATTTG GNTCTGACTC
 AGGCGACGTA CTGTAAGACG ATATTACTTT AATCATCTC ACATCAGTAT TTATGGAATA GCCACAGGTG CCTCATCCTT
 TAGTAGGAGT TAATTATACA TTINCTGGCC GAGTAAACAT NTCGAATGG TATGTATGTA TTT

SEQ ID NO:420: (Length of Sequence = 406 Nucleotides)

TTTAAATATT AAGTTAAGTA TATAACTTGC CCTATGCCAT ATTGCCTTAA TCAGGGGACT GAGCATCACA TTTAGATTTG
 ATGAGTTTGG GAAAGTTCT CAACATCCA GACCCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT
 AGGGAGCATT AATGCTTTTG TGGTACTAAA CATATTTTIG AGCTTAGATA CAAATCCTTC TTGTCTGAA CTGATAGGGT
 AGGAATTGTT TAGGTGCTTC AAATCCAGAT CTTTCAGGGG TTGCCACCTA AACTCATCTT TATGAGTAACT TCTAGATAAT
 AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAATTATCA TGAGGNCCTG TTTTLAGGTT
 AGGTCC

SEQ ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTG CTGACTTGTA CACAATGGAC CATATGINCT GTCCAAAATA CACCTACATT AACTGTGTG GAACANGAAC
 CTGGGCTTTG CAAAAAGAA TTATGATTG AAATGTAACC CCCCCAAAA AAAAATGAAG CTTAGAATTG AAGGTAGCCT
 TTTACCCAGA TTGTTCACCA GNTGTAAAA TTCTAATATG GGTCATTAACT TGTTCACAAA TAATTCATAT TTGNCCTAT
 GGTTAAGGG CTCCAGATTG AAAAGGTGCT CTGAACCTCT G

SEQ ID NO:422: (Length of Sequence = 220 Nucleotides)

TTGTATTTT TAATAGAGAC GGGTTTTGC CATGTTGGCC AGGCTGGTTT TGAACCTCTG ACTTCAGGTG ATCTGCCTGC
 CTCGGTCTCC CAAAGTGCTG GGATTACAGG CTTTAGCACT GTNACTGTCT GCCTGGCTGG CTGGCTGGCT GGCTTCTTT
 CTTCTNITT TCTNCTCTC TCTCTCTCTC TCTTCTTTC TTTCTTCTT CTTTCTTCC

178

SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGTCTCTTA TCTGGGCAAG CTTTAGACAT ACTAGCTTGG TTGGAAACTG ATATTAAAAG CCTAAAACAT GTAACCTTNC
 TTATCAGGTT ACTATCATGG GGAACATAAG ATTCTGTT TTTTGTATGT NCCATACTA TACTTTAGTA AGCCCTGATA
 TACGGTGTTA ATTTTCCTNC AGTGAAGGAA ACATGAAGAT ATATTTATGT GCACACATAC ATATATATGT ATATATAAGC
 TATATTCAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTTCTAGCTA AACATGATCT TGTGAAATTC TTCCATATGT
 GGAAAAGTCG TCAGTTCATC TGACATAGAG CAATACCTA CATATATACA CACAGGGTGC TATGGTATAC A

SEQ ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGGAGCCT GAGGCATGAG AATCGCTTGA GCCCTGGGNG TGGAGGTTCG AGTGAGCTGA GACCCCGTCA CTGAACTCCA
 GCCTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAAA CAAACANACA AACAAAAAG CCTATTATAA AACAAATAGGA
 AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAAA TTAATAATTAT CATGTACATT CCACTACATG
 TCAAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG
 CTGCTTATAT TTATTGGGN ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TCCACAGGGC GGCTGGGGT CTGGAGATGG GCGCTGGGCC CAGGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC
 CCAGTTCCT GGTCTGCAGT GCTGCTCTCT CCCAGCACCC CTTGGGGCAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG
 GGGGGTAGAA ACCAAGGCTG GCAGAAGTNT AGCCGGGCTC CTTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACTTAC
 TGTACCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG
 TAAGATTGAG TCTCTGGGTG AGTACCCAGT TNCCTGGCTC TAGATGGGCG CTTTTCCCT GTGTGTCTC AAATGATTGG
 ATGAGGCCAG GGTGCTCTCT TGGAGTCTT TCTGTAAGGG CAACTGAT

SEQ ID NO:426: (Length of Sequence = 417 Nucleotides)

GCCTGGNTCA TCGCTGTCTT TTCTCTCTTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGTCTCT
 GAGGACCTTG GTGTGTTTCC TCCTCTCTTA GTCTOCAGAC CCCAGCCTGT TCATTCTGA GCTTCTCTTG GCACCCCTTC
 CTTGGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGGT GGTGCTTGGG AGGCCGGGGC AGTGCCAGGG GCAGTCTCA
 TACCATCTTC CCACTGGCTT CCTCTCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGNTTTC
 TGNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG
 GTGGAGACAT GGCTCAA

SEQ ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCTGTCT CTACTAAAAA TACAAAAAT TAGCTGGGCG TGGTGGTGGG CGCTGTAGT CCCAGCTACT CGGGAGGCTG
 AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANTTGAG TGAGCCGAGA TAGTGCTCT GCACTCCAGC CTGGGTGACA
 GAGCGAGACT CCGTCTCAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTCTTAC GTTTCTCTT
 TTTCTCTCT CTCCACCCCA CAGTCTTGC TTTTAAACCA AGGTGTCTCT GCTTGATGGA AATTCACATG CTAGTCT

SEQ ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTNACG TAGAGACGGG TTTCTCCATG TTGGTCAGGC TGGTCTGAA CTCTGACCT CGGGTGATCC
 GCCTGCCTCG GGTGCCAAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCCGT TTTTTTTTTT TTTTTGTAT
 AGCAATGGAA GAATGGCTC GTACACACGN TAGAGTGGAA AGTCCAGGC ACCAAGGNTT CCCACCTAG AAGCAAGCTC
 AGGCTTTCT CTTCATCTT CCAGGGAGAG CACTGAGAGA TGATGGGGG TTGGCA

179

SEQ ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGTTGGA GACAGGAGAC AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTACTG TCTCTGCTC CCGAGTGCCC
CANAGCCCAT GCAGACCCCTC TGCTGTCTAT GATATCCTGT TCAGCCCTCA ACTTTCTCTA CCATCCCTGC AACTGGGGTT
CACTGTGAGC CAAACCAATT TGCTTCTTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TMTCAATCAA GGCATTTOCC
ACCTCTINTC TCCACTCATA TCCCTTCCCA AACTGCCTTT CCTCATTTCT CCGTCTCCAG GGAGAGGGAC TNCAGGCTAC
CACAGNCAA AATGGTGGTC TTCAGTCTTA CGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG
GACACACAGA NGTGGATGCC AG

SEQ ID NO:430: (Length of Sequence = 332 Nucleotides)

CGGATCAGC ACCCGGGACA GCGCCACCGC CCACGTGCAG GGGNTGGGGT CCGGGCGGGG CTNGCGCCTC GGCGTCTCCC
GGNAGTNTCC CGTCCAGCCG TCGAGCAGGG TGCTTGANTN TMTCTGCAGA AAAGACTCTA GGACCCCGCC ACCATGTTC
CGGAGCCCCC AACCCCGGGG CCTCCATCGC CGANACGCC TCCCGACTCC AGTGCATCA GCCACGGCCC AGTGCCCCC
TGGGCCCTGG NCACCATCGT GCTGGTCTNA GGCTCTCTNA TCTTCAGCTG CTGTTTCTGT CTCTACCGA AGAGCTGTG
GAGGCGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCATTATT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA
GGTAGTACAG GGCCAATAAC AGATTTTGGG AATTTTCAA ATTTCTCTT GAAGTAATT TACAGTCAGT AAATGGAAGT
GGAAAAGAGG AATAGAAGAG CATTTCATTG ATTTTTTTT TCTCTGTAC TTACACATCT CATGACCTCA TGTTCOCAGA
ACTTAACACT TAGTTGGGTT CTAGTAGATA TTTTGGGTTG AAAAGATGTT TGCTGTTTG CATTTTGTTG TGTTTGTTG
GCTAGCCTGT GAATCTAGCA TTGTACGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGGAAA TGAACITCAA
TAACATATCC CAG

SEQ ID NO:432: (Length of Sequence = 292 Nucleotides)

TTACCGTGT TAGCCAGGAC GGTCTGATC TCTGACCTT GTGATCTGCC CACCTCGGCC TCCCAAAGTG CTGGTATTAC
AGGCGTGAGC ACCCGGCCCG GCCACCATTC ACTAATTTTC AAGAAATGTC GAAGTGTTCT ATATTINCTT CCCACTCCAT
AGCTCCAACA TTGTGGCTA TTATGAATTT GGCTATTAAAG TGATGCCAAC AATATTTAAT GAAAAAAGA TATAGCAGTA
TAGTTGAAGG AGGAAGCTGA AAGAAAACGG TCCATCNGTG AGGAAAAGGC CC

SEQ ID NO:433: (Length of Sequence = 335 Nucleotides)

TTTTTTTCTC AGCAGAGGAT TTTATTTGGT GTCACTGTG GCACAGGTTA GAGGAGCCGA AGTGCTGINT TTGTGGTGGG
GGGGGGACCA CAAACCCCGG CCTGCCCCC TTGCTTACAT AGGCTTCCCG CCTAGAAGCG CANCATGAAC ATGCCGCTAC
GGATCCGGTT GTAGTCTGGG AGCTGCTCAA TGGGGCCATA TCCAGCCACT GCTGGGGCAC TGGTCAATAGA TGTACTINGA
GCAGATCTCA GTTACCACAC TGGCATCCAC CTCGCCAAT CCGGCTTTCC CATTAGCCA GGGGGGNATG CCGGNGGGCC
ATAGGTCAGG AGGCT

SEQ ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATTGGA GATGACGTGT ACCCATCCTC TAGACAGTCT GTGCTTTTCC TGTCTTTGGA GCTTCCAGTT
CCACCCCAT CAGTTTTTTT CTGACCACTC CATCTGCCT TATTTCTCTC TCTTTCCTT TGACTGGAAG AGTACTCATC
TTTTCTAACA TCTTTTCATA AACTGTTTTG ATTTCACTTA TATGATTTT NAACGTATAA TGTGCTGGTG TTCTATTTCC
TCAGTTAGAT CAGAAGGCCC CTAAGACAG GGCTCCATTG GTGTAAACT GCCATCTCA AGGCTCTGGA CTGTATTTCN

180

CTTTTINAC CTNCACAACA AGGCACTCCT CTGCAACCA GTCGGAATTT CAGTGCCTGT GGGTCAAAGT

SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCTACTAAACA GTAGATTTAT TTTATGTAGA TTGTTTTTC TATAAAAATA TATTTATGTG TTCACAGGAA AAAAGTTGAG
TTGGTATGTG GGGGTGACTT TCAGATACAT AATTAGTTAA AGGTTTGCTT ATGAAGTTAG AAGGCATCTT AGCTTTTATC
ATTTTCAAAT TTTTCTTCAT AAAAAAGAAC ACCCTGTGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTTTAGAGT
TGAGAGAGTT TGAAATAAAA AGGTTAAGCA ACCTGCCTAA TGTTTATGTA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT
TTGGATTTTC CCAACCCCTG GACAGTTCTC TAGGGACTCA TGCCCAACAA CCATTCTTGA GACTATATAC AATCAATTAC
ATTAAAATGA TATTGACAGT AGACTAG

SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTMTTNTAG ACACAGAACA AAGAATCAGA
ATTTGAAAAA AGANGAAAAA CAAATCTNCG CAGCTGCAAC TTAAAGTAT CACCTTTATA GATGGCAGGG ATTTCCATTA
TGCAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTAC CACTTGCAGT CTNGTATTGT TGGTGGCCAT
GTGGTGAGT

SEQ ID NO:437: (Length of Sequence = 404 Nucleotides)

GTCAATCACC CTAATCCCTC TTTCACCTTC ACAGAACCTT CACACTCCAA TGTACTTGCT GTTGTAGAT GCTCCTATAA
ACAGAAAGCT CTGGGAGACA GGTGTCTTGT TATCTTGTCT CTCGTGCTATA TCTCTGGGCC TATCACAAGT ACTCAAAGCA
TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GGGCTCAGGA TAACCTAGAC
AGCCTGTTAG CACGGNTCAC TGNINCCAC CCCACAGTT TCAGGTCTGG TCTGGGNTGG GGCCCAATAA TCTGTATTCC
TAAAAGTCCC CAAGCAATGC TGGTGCTGTT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGGACAA
AAGG

SEQ ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTTCCAT TTACTAAAGT CCAAGTATGT GTCAAAGTAG TTTTCAITCC TCACAGCCAT GTTATGAGCT
AAATATCACT AACTTTCCCT TTCAAAGGTG AAATAAAGTG AGACTCTGA AGATTAACTT GCCCAAGGTC ACCTAGCTCG
TTAGGAGGCA CAGGTGGGAC TTGAACCCAG TTCTTTCTGA ATTCAAACC TCCAAAATGT CTGTACATC AAGCTGCTTC
AATGAGATGC TAGAAAATCA GGACAGTGAG CAAGCTGGAG ATAANGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC
ACACACATAC CCTGCAG

SEQ ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGTGTAT GAAGGTAGCC ATTTGTACA TGTACCTTG TTAAAAACAA AAGAGCAGCA ACATGTTTAG AGTGGTGTCT
ATAGATAGAA CACTGCTGTT ATGTTTAAGG AAAATTGGGG CGGGGGCAGA AAAGATCAAT ATGACTAGTT AGAAGACTAT
TAAGGAGAAC TTTGTACATG AATTATGGAT GTAAGAATTA GAAAAAATAA GATGATCATG TTCAGAATTT TAGCTTTTTT
ACAATTGTAG TGGAAAAGAA AACTCCTAGA GTAATGAATC AATGGTATCC TACAAAAAGA GAGGTGCCAA AAATACCATG
AAATATTATA TTAAAAAATT CACACGNATA GGTAGTTATA ATATGTAAAG GCCAGACTTC

SEQ ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTTTTGATG TAATTTTATT TTTGAGAGAG GGTCTTGCTC TGTACCCAG
GCTGGAGTGC AATGGGGTGA TCTTGGCTCA CTGCAACCTC CGCTCACGG GCTCCAGTGA TTCTCTGCC TCAGCCTCCC
GAGTAGCTGG GACTACAGGT GCACACCACC TTGGCTGGCT AGTTTATGTA ATTTTTTGTG TGTCTGTGGA GACAGGGTTT

181

CACCAATGTTG CCCAGGCTG3 TCTCAAACCTC CTGAACTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT
GAGCCACCAT AATAA

SEQ ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATGTG TTTCTGCTTC AACCTGCATT TCCAGAGGTG CCTGTTGGTC TGTAATGGT TCTGGCATGT TTATAGGTAT
TACAAAACCA AGTCTTATTT TGCAATTCAC AGGATTTAAG ATGAATAAAG TGATGTGGTT GTGCTAGGTT AGAGTTGTAC
AAATTATACT CCCATCGCGG ATGGTGGCGT CCCAGGCTTA CAACCTGACC TCTGCCCTCA CGCCCATCGT CACGCGCTCC
CGGTGCTTCA ACGAGGAGCC CCTGAAGCTG GCGGGCTTTC AGCAGGAGCC CGGCCAACCT CAGTGACGTG GTGCAGCTCA
TCTTTCTGGG TGGGACTCCC AATCCCTTTT CCGTTT

SEQ ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTTG TATCTTTTTC TATTTATTGA GATAATCAAA TGATTTTGT CCTGCTTCT ATTGATGTGA TGTATTATGA
TCATGTTTAT TGATTTGCAT ATGGTGAGCC ATCCTTGAT TCCCTGGTATA AATGCCACCT GATCATGGTA TATNATCTTT
TTNATGTGCT ATTGGAATTG GTTTGCCAGT ATTTTGTGTA GAATTTTTC ATCTGTGTCT ATTACGGATA TTGGCCTGTA
GTTTTTTTIG CTGTGTTCTT CTTTGGTTT GATATCAGGA TAATGCTAGC TTTGTAGAAT GAGTNAAGGA GGAGTTATCT
ACTCTTCAAT TTTTGGGAAC AGTTGCAGAA CTGTTGTGTG TTTTAGAACA G

SEQ ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAACTGCCT TTATTTTTTN ATTTCCCATC CAGAAACCCC AGTGTGATGG TGGAAAGCAGC ATGAAAACAA CATCTCCCCA
GGCCTGCGAG TAGAGGCGAA GGAACAGAG CTGCCCATGT GCCTGINTCT AAGAGCGCCA CCTCAGGTT GATGTACCTT
GTGGGAGACC GGGTCCACCT ACAGACACCA GGTGATGGTC CACCAGGCCC CAAGCTCCAG CTTGCTGAGT CCCCAGACA
CAGGCTCATT AAATAGCTTC GTACAAAAC CCAAGGTTGT CCTCCAGCT GGTAAAAAAT TGGGCAATTT CTACTTGGAG
GTCTGCTGT

SEQ ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTTA AGTACATAGG TCTTTATTTA AACACTGATT TTTTTTTTAA ATATATACAC ACAAACTTA GTTCAGCAAG
GCTTCATGAT ATACACCAAT TCCAAAATAA AACAATCAAA TGGTCCAGGT GTAGAATGCC AGATTCCITT TATCATCTGC
GAGGAAAAGA GAAGCAGGAT GAGGAAGAGT GAGGGAAGGC GGGGACAGGC TCTGCCAGA NGAGCTGCCG CCTCCTGGCA
CAGCAAACGC TCCAGGCTG GGCCTGTTC ATATCTGGAG TCGGAGGGAG ACTCCCATCG GCGCTTTGG GACTGAAAGG
CCCAAGGCTG TCACCAGGTC CCGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGGT GAGAAATAAA TTGCTGTGT TTATAAGTA ACCGTMTAT GTTATTTTTT TATAGAAGCC TGATCAGAAT
AAGACAATAT TGGATAGAAT ATTCAGGAAT GTCTTGCTC CAATGTTGGC CCCCCTGTAC TGAGCTCTAA TCTACACTCA
CCTAAAAAAT TATAAATCA TAATAAACT GAAAAAGTCA AACTCTCAAT TGATCCCGAG CACAAATATC ACAGTGTGTT
ATTTAAAAAA TTATGTCAAG GCGCTAAAAA GCTAAATCC NCAGTCTGTC TAATATTTCT CT

SEQ ID NO:446: (Length of Sequence = 367 Nucleotides)

ATATATATAT ATACACACAC ACACATACAT ACATACATAC ATATACATAA CCTGTTTGG GTAAGGCCTA TTGACAGAAG
CCAGATATCT GGGTGAAGT TAGAAGATGG GCAAGGAATT CTTATCTCAG AGTTTCAACA CTGCGACAAT GTGGAGAGAA
GTCTCCTGGG AAAATGCAGA TGCCCAATAA CTTCCAAAAG AATCAGGGAA GTTGGAGTAT TTTTGAGATT TACAGTGTCT

182

TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT
CTCCTAGGGN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CTGCAAACCC TTCAGCATTT AGCTAAAGTT ATTTACAAT TCAATGCTTG TCTTGCACTG TCCTGGTCAT TTAAAACTG
GTATCTCTTC AATAGCAAAT AGTATCAATA CAGACCACTA AATTGGAGG GAAAGTGGTT TCTATTGCAG ATGGATGTAA
TTAAATTTGG TGTAATCAC AGGGTACAGA ATTCTTATCT GGTAAGAATT CTGACTTTTT TTTTAAAGAA GAAAAAATAT
ATCCAGATCT GTATCCACAT GCTATTTAA TGCTCAGGNC AAAAGAAGC CACTA

SEQ ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCCC ATCAATCAAC TGTGCATAAA GAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA
AAAATACAAA AAACCTAGCA GAGGATTGTA TCCTTTGCCG TTTATTTTGA TGACCATGCC ATCTTCTAAT CCCAGAAAA
AAACTGGAAA ACAGAATAAA TATAATTINC TGATTAINCT TATGTAACAT AAATGGAATA TATATATATA TAT

SEQ ID NO:449: (Length of Sequence = 341 Nucleotides)

ACTTCCTTCC TCAGGCTCCT GTACCAATCT TCAATTCACT TGGGATGTCC TAGTCTAAAA CATTATTTTC ATTGAAAGG
AAAAATATCA ATTTCTATCT AAATTGGAGT AAGATTCAAT TCAGATGTGT TTATTTACAA AACATAAGTT TGTATTATAT
CTGTGTTTAA TTTGATCCNG GAACATTACA TGTAAGAAGC ATTCCATGTA AAGAACCAGG CAACTTGGCC AGGCATGGTG
GCTCACACCT GNTAACCCCA GCCTTTTGG GAGGGCCAG GCAGGTGAAT TGGTTGAGAC CAGNGGTTTC AAGACCCAGC
CTGGGGCAAA TATTGGCGAA A

SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTTT GACACAGTTT CCAGTCTGG AAACCTTTAG CTAATCTTTA GCATTCCITC AATGGTGGGA ATGSCAACA
GATCACCATA GTATTAATAC TCTGTGTAAT TTTATCACTA GAAATGGTTAA TTCCATATC ATAGTAGAGC TGTGTCAGAT
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT
AAATTAATAA AGTGTAATA TAACIATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GGGCGGGCTC CTGGGCACCC ACCAGCTCA TTCGCGAGC GGCTCCCCCTC CTGGGGTTGA GTGTCTGGG CCTGAGTCTG
CAGCCTCAGC CATCTGTTCC CCAACTTGAT CTCCACTGC TAGTTACAAA CAAATCGCCC GGCTTGTGCA AACCTCCTGG
GCTCAGTCCC CAGTCCCGCG GGGCATCATT TCATTCTTTC CTAGCCTGTA AGGTTTCTCC TGAAAAATCT ATTGTAGTC
TAATATGAAT TTCTAATAT GTGACTTAAG GCTTTTCTCT TGCTGCTTTT AAAATTTTCT CTTTGTCTTT TGACTTTGAC
AATTGGGCTA TAATGTATGT TGGAGAGGAC C

SEQ ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATCTTGTCT TTACCTATGG ACTGGCTTAA GCCGTGTGGC ATCCGAGGAA TGTTTCAAAT GTGTCTGTGT
TTCTCTTTAC ATTCTTATTT GTACCTCAIT GTTCAATTCA CTTTGTGAAA TTCCACCTAA CATTTAATTA TTTTAAATTT
CTCCGTCAATG AAGTTATTTT AAGACACTGG AATAAGTGCA GCTTGTGTTA TAACAGCATA GGATTATAAA CAACCTAAAG
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATTCTGTAGC TGTTAAATA ATAANGAAGA TCCTGCTCTG
TGTATTTGAT ATGGGAAGGC CCCCCAAGGT CTACAGTTAA GGG

183

SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATTGAAGATA TTATCACAGT GCTGAAGACT GINCCCTTAA CTGCTCGCAC CGCCAAGCGT
 GGCTCTCGGT TTINCTGCGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT
 AAAAGATCTT AGAAACCAAC CATACAGACG AGCOGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTTGAT GATCAGAACT
 TCGGTTCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTCAGG
 AGGTTTTCTG TTGCGGTCAC CCATGATGGC GGGCCINCC ATTTGGGCCA ACTTTTCTG GG

SEQ ID NO:454: (Length of Sequence = 391 Nucleotides)

CGTCTGCCGTG GTGTGACTGG CTGGAGAAAT AAGTLAGGA GAATCTAGAT ATGGTTGAAT TGTGATGCT GCTCAAAATT
 TGTTCCTTG TGACAACAAC AACACAACA ACAACAACA CAACAACAAC AACAGGTGAA ATTATCTTGA AATACAAAAG
 AACGTCIGTT GGTCCGAGA GTGAAAAAAG GAATCCTTAA CAGCTTCAGC TTGCACCAAG AGGATTTTTT TTTATCAGCT
 TCCCTTCATA AGAGAGGATG GAGGATTTTG GAAGAGACAG AACCTGGGAG AAATTCAGT GAGCTGCCAC TTACTGGTTT
 AACCTACTTC CACAGAAGGA ACCIATTATT GTINIAATTG GGAATTCAGT AAATGTGGGC CATGTAAAGG G

SEQ ID NO:455: (Length of Sequence = 282 Nucleotides)

TTGAGTACTC ATTGAGGAC TGCAGTCATA GATTAAAGT GTAATCAGTC AACTCAGTGG AATTACTTTC TCCATTAAATC
 TTAATTGCT TCAGGACTGT TTCAGCCTAA GCCAGTAGCT GGGTTTAAAC AAATTGAAG ATTTINCTAG GAGAGTTTGG
 CACGAGGAGA GAGGGGCAAA GCGGTGTAAG GCAGTGTITA TAACAGTGGC CCATGGAATT GATCATGGGT AAAGAGAAAA
 CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAAACAAAG CA

SEQ ID NO:456: (Length of Sequence = 340 Nucleotides)

CTAACTTATG TTGAGATCT TCAATGAAAT TAGTACTTAA TATTINGCTT TATCTCTC AAAAGATTTA ACATGATAAT
 TCTGACCTAA TCCAAAAAA AAAAATTCAT GGGCCACTGT TTTGCATGTA ATATGTAAGA NCTCACCTTG ATGTTAAACT
 CCAACCCCTG GCTGAAACAG GTTAATGATC ATTTGTINGT ATTTATTTCT ATAAATAGTT TGAAGTTGGC CAGGCCTGGT
 GCGCTCTGCG TGTGTCTCC AGGGTTGGAG TTGGGTGGCG CAAATCTCGG CTTCAGTGCA AGCTTCGCGC TCCCCGGGGT
 TCACACCATT CTCTCTGCCT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CTCCAGAGAT TATCAGTGGG CGGATGACAT TTGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTGTC
 CTACAAGGTA CAGCCTCGGA ACTGGCTTCT GTTTCATGTC CACGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC
 GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT
 TGCCAGCTGC TGCTGAGTCA CAGATTTTAT TATAAATAGC CTCCCTAAGG AAAATACACT GAATGCTATT TTTTACTNAA
 CCATTCIATT TTTATAGG

SEQ ID NO:458: (Length of Sequence = 370 Nucleotides)

GTTCCTTTC GGAGCTGAAC CAAAGAATGT GCACCCCTCT TCTCTAGTGC TGTGGTGTCT GCTTATTTTT GTATTTGTGC
 TTTCATCCA TCTCTGTGA TCACAAGGCA TTCTTAAGGT TTTCTAGCAC GACTTGOGGA CATCCAGACT CGTGGGGGGC
 CCACCCATGG CTCGGTAAGC CAGCAGCCCA GGGCACTGGC ACTACCATGA GGCACTGCAT TAATGCTGTC ATACAGCTGT
 TACCCGACGG CGCACACAAG CAGCAGGTCA ACTGCCAAGG GGGCCCCCAT CAGGTCACC AGGCGTGCCC CACGTTGCAA
 AGGAGGAAAA ACAAAATTC TGGTTTCCGT GTGGGACAGT AAAGCAGATG

SEQ ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTTTCTAG AACTGAAATC ATCTACGGTT CTCAGAGCTA AACTTCCAAA GCTACAGTCA GCAATTTTTC ATCAGAGCCC
AAGGGAGAGG GGCCAGGGTA AAAGAGACGA GACTGTAGAG AGGCATAGAG AGACCACTAG GAAGAGGGTG GGAGAGGGCA
CTTATTTCTC TCTGTCTCT CAGTGGGTTA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGTINGA
TGAGAAATGA CACTGGAAGG AACATCAAAG CCGCAGCTAC AAAAAGAAAG TCATCAAGCC CCAAAATAGAA GGGGGAGCCT
CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCTTTTGC ACTGCAAAAG GAACAGTCAG CAGAATAAAC AGACAGTTAG AAGTACTTCC CTATGTAGAG ACACACTCAA
GTGAAAGGGA ACCAGGCTCT ACCACTTGAA ATAAGGAGTA TCAAGGAACT TGTGGACAGC TTTTAAAACT ACCACTGGCA
ACTAGGCTCT GAGGTGGATA AATGAAGAAA TTGGGGGAAT CTCACACTGG AGATGTTTGA TGTAGGTAAA TGANCTGAGA
TTCATTAGGT GTGAAATAAT GAAGTGTATA TATAGTTCTG CATATACATG CCTGGGGAAG GTATAATATT CAGAGGCATA
CTATCACTCA ATTTGTATCT GCTGTGGGCC TCAGACAGTA CAGGGGCAGT GTTTCATTG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCATTAGA AGCCTTTATT GGGTTATATT CAATTGACC TCCCACCAA TTAAGCGGA AAAAACAAAA AAATAAGAAA
TCCAGTAAA AGAGCCCTC AAGATTTCAT AACTACAAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTCAG
AGCTGTATAA TACAAAATT CCGTAAATTT AAGCAGATGT TTTCTCACT GATGACAAAT CTTCCAACAC AATGTGAAGT
TATGCTACTT GGGATATTG TAGGCAAAAC CATTTTTTTT TTGTACAAA ACAAAGCAA GGGACNTGG AAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCPIN CCTCGTGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAACAAAA
ATATGTAAGT TAACACAGAG TGTGGAGGG TGTAGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA
AGAGGGCATT CTGGAAGGC CTAGGAGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC
AGAGGAGENC AGAGGAGGGC A

SEQ ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTCTTCT GAGGGTCCGC TGCTGGCAGT
ACCGCCAGCT CTCTGCTCT CACAGGGCTC CCGCCCCAC CCGGCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG
CAAGGTTACG TTATATATAG GATTCGTGTT CCGCGTGGTG GCCGAAAACG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA
GCCTGTCCAT CATGGTGTA ACCAGCTAAA GTTGTCTGA AGCCTTCAGT CCGTTGCAGA GGAGCGAGCT GGACGNCCT
GTGGGGCTCT TGAGAGTCT GAATTCCTAC TNGGGTTTG TGAAGATTTC ACATACAAAT TTTTGA

SEQ ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCCGTG GCTGTGGGC GTCGCTGAA CGTACCAGGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG
AGGCAGGGAG CCGGGGAAGT GGGGTGGGT CCGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGCTCCCT
CAGGCTGTCA CTCTTAATCA TCATGTACT ATCTCTGGG CGTGTAGTC ACCATCAACG ACGTGTCCCC CAAGCTGCAG
AGGACGCAA TCAGCTCTC CAAGAGGCTC TGTGGCCCT CTCCACATGG GCTTINAGGT CAAGGGTTGG GGGCAGTTTC
GGACCGNCCT TCCTGNTCT TINGAAGAAG ATCTCCAAN GTNCCCGCT TCAGCTTCT CCGGGCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)

185

GACGACATTT ATTCCITTTT CAAATGTTAC AGTAAACCA GGTGGAAGAG AATGGTTTTA GCAGTTAGAA AAAAAAAAAA
 AGTACAAATC TGGGGTTTGG CCATTAAAAG TTATTTACAA CAGTGGGAGA AAAAAAGNCA AGAAGTTGTT TCACATTACA
 GACCTCCCCC CACCCCAAAG CCTAATACTT GCTTACCAAG TCAAAAAAGA GACACAGTTG ATTCACAGGC TGGAGGTTTG
 AACCTGAGTA AGACATTTAT AAAAACCTAG ACGGGGCAGT GTCTTNCCTA GCCCAGGTGC CACTTAGGCC AGCACAAGGG

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATIGTATTT CCCITCTTCA AATTAAATTAC CTACCAAAAA ATGGAAAAGA ATTTTACATG CACTTTAAAA TAGTAAATG
 GAAAGTGAAT TTTTAAAATA TATGCAATTAA AAGTTTACTT TAATTTCCAG TGGGACTTCC TTTATGAAAT TTTCATAAC
 CTCTTCTCGG AGTATTACAA GATCTCCAAC ATCTCATAAA CTAATTGTGA TATTAGTGGG ACCATAAGCA AATGTATATT
 TTTAGTGGAA ATAGATTATG AATGAAAGCC AAGCACCTTA CTTTAAAGCC AAAATATGAG ATTTTCCATT AAAAACCATT
 GGTCCATAAT AGGGAGGGGG GTTTTTTAAT TT

SEQ ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGGCCAA AAAATAAATA AATAAAAATA AATACCATTT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGTT
 GTTTGAATTA CTACGCCTAG AATTTAGAAT AACTACTATG ATTAAAACGA AAAAGGCTTT AATGGATAAA ATAGATAGCT
 CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACAAACGCA
 AAGCGTTAGG GATCAAAAAC ACTGTAACAA AAATTAAGAN TCCCTTTTAT GGGCTTNTTA ATAGNCTNGG ATACAGGTAA
 GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEQ ID NO:468: (Length of Sequence = 336 Nucleotides)

TGACATCTGC ATCTTACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTTTTATT CATAAAGTCA
 CATTATCATT GTAGAAGTCT GTAAAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAAATCTTT
 GAGGAAGCAT CTGCCTCGTA GCTCTTATC TTTCTATTTT CTAATACAGG GACAATGTAT ATGGAAAGAT AAATGTGTGT
 AGGTGTATAA ATTCTCAATA AATATTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNTTAACTCA TCCTGAGGTA
 CATTTTATTA TTGGGC

SEQ ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGTA GAATTCGTG TGGAGACGTT CTCCCTTCA ATTCAATGGG AAGGNTCTTT TCTGGCATGA NCTCTCCGAT
 GTCTAATGAG CTCTGAGCAC CATCCATAAG CTTTNNCACA TTCTTTANAT ATAAAAGGTT TCTCTCCACT GTGAAT

SEQ ID NO:470: (Length of Sequence = 350 Nucleotides)

TTCTCATGTC TGAATTTTAC ACGCACAAGT CTGAAATGTG AAGGTTTCTT AATGTTGGTT TTATGGTTTG TGTAAGATTT
 TTGGGAAATG AAGGGCTCTT CATTAGGATA AAATGGTCTT AACTTCCCAG AGAAGAATTT CCTGACAACG TGGCTGAAGT
 TAGATACAAA TGTTAATATA GAAGANTGCT TTTATTTGAA TTTCTAGCAA ATGGTTTTCA ACTACTTTAA ATATGACCNA
 CTTGAAAGTA TTATTCCTNT TTTAAACTA CTTTINATGT ATAGATCTAA GGTCTGCTTG AAGCTAGTAG GTTAAAGTGT
 TTGAGAAATA AAGGCAAGAT TTTTNCNTTA

SEQ ID NO:471: (Length of Sequence = 270 Nucleotides)

GGAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA
 GTATAAATGT GAAGTGGAGT TTTACCACGT GATCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTINGGAG
 TCACAAATAT AAAGATGTAT GACTTINATG GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC
 AAGCCCCGAA GCATTCTAAT GTTTACAGCT

SEQ ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATTGTAG TTCAAATACA TAAACTGAAC ATTCAAACAT CTTAAAATTA AACITTAGCA ACAAGTTTA ACATTCAAAC
AGGAGTATAG TTACAAGAA ACACCCAGAA AGGTAATTG TTGTCTAATC CAGAATATTG ATAAAGATCA CTTAATGGTG
AATAAAATAT GTTTAACCAG TGGTCTATT CTGGCCAACA TGTTAGTTAT GACCGTGGTT CCATACCTGA GAAGAAATTA
CTACATAAT CTCTCTTAG GCTAAACAAC ANGACTGGT CTATAATTCA GAGGGGNTAA TCAAAGCAG TAAGGGTACC
AAAATAAAC TAATCTGATC TTTAG

SEQ ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGAAT TCTGTCTAG GAGACAGTGA GTNCTAAGTA CACTCTGGAC AAGCACCAGA
CACAGAAGCT GCCTCAGTTT GTGCTCCCC TGCAAGCAG AGCCTGAGAC AAGGATTGG GTACAAGGAG TTCTACTCAA
TATTATATTT CCAAGATGCA CCCATGCTTT ATATGGCTAT AGTGATCCA TTTACTGCT TTATACTTTC CATTAGGTGA
CTATATTAGT ATATATTTAT AATTCCTAGG TCTTTTGTG CTCTATTG TTAATAATTA TAAACTCCAA GCCCATTGTG
GTAGATTGCT ATTCTCAGA GATATTTCT GCTCCTCCT GGGGGACAAT AATACTNTTC TCCCATCAAT GGCAGATGTA
GGGCTTGTA CATTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GTGTGCCAC CCAAATCTCA TCTAGAATG TAGTTTCCAT AATCCCCAG TCGTGGANGG GACCTGGTGG
GAGGTAATCG AACCATGGGG GTGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA
AGGGACTTTT CCCCCCTTG CTCTGCATTT TTCCATGCTG CCACCACGTG AAGAAGGATG TGTTCCTTC TCCCTCCACC
ATGATTAAAG TTTCTINAGG CCTCTCCAGC CATGCTGAAC TGTGAGTCAA TTAACCTCT TCCCTTTAA AATTACCCAG
TCCAGGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAACTTGA GAATNGGTGT TCAAGTTTCA
CTCTGGCCTT NAACAACCCA AAATTTA

SEQ ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCCGCTAGG GCGGCGGGG GTGCGGACGC CGGGCTAGGG GCGGTCATG TGGCGCTCA CGGTCCCGCC GNCCTGCTG
CTGCTGCTGT GCTCAGGCTT GCGCGACAG ACTCTCTTCC AGAACCAGA AGAGGGCTGG CAGCTGTACA CCTCAGCCCA
GGCCCCNAC GGGAAATGCA TCTNCACGGC CGTATCCCA GCGCAGAGTA CTTGCTCTCG AGATGGCAGG AGTCGGGAGC
TGCGGCAACT NATGGAGAAG GTNCAGAACG TCTCCAGTC CATGGAGGTC CTTNAGTTNC GGACGTATCG CGACCTCCAG
TATGTACCG GCATGGAGAC CCTCATTCCG A

SEQ ID NO:477: (Length of Sequence = 333 Nucleotides)

GGTCTCACTC CGTCATCCAA GCTGGAGTGC AGTGGTGCAA TCCTCACTC ACTGCAACCT CCGCTCCCGG TTTGAGTGAT
TCTCATGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCAGCTG GGATATAGAA TCTAAGAGTT
GATTGTGGAA AACACGTGAA TCTATTGCCG GCATTNTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTT TTTGCAGCTG
GAGATGAAT TTTAAAATC CCTTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAAACAGCT NTGCATGGCA
GGCCCGCAA TAG

SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGTTAAA ATAAGTAAT ATGAAATAAT CTAAAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATTTA
AAAAAATAGC TACAATTTTA GTTAGAATGT TTCCCTTATG AGAAAGCATT TTCTGCATAA CTTTAAATGT ACTGACCTTT
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCCCTC CCTGTGCCCT ACCAGGGCCC ACCCCAAGTC
CCAGTTTCTC TAGGGGGTCT CTCGGGACCC CTGAATCCC TTNCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG

187

GCAGACCACC CTACATNCTC CTGTGTGTGG GGACACTGTC AGGNTGTCTT CCTGCAATTA GNCTCTGCTG AGTTTCCTAC
CATGTGNCCTA GGATGGNGTC CATAGTCGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGTATC TNCITTTAAGA AAAACACTTC TTCAAAATCC TACACTATGA AAAACTGTCT TCAGGAATTG TTTATTTGGT
CCGTTGATCT AGTGAGGCTG AGTTCTTAAA TCTTTCACCC CCAAGTTAAA AATTGGAGCA ACAAACAAA ACTCCAGCAA
GGCATAAATA AGATATTAAA GTGCATATAT ACAATACCAG AAAAGTTTAG ATTGGGAACA GCAAAATTT CTAGTGCAAA
AACTGCTTTT GCCAGCAAAG CTCCCTCTCT GGAATCAAAG GGCTACAGTA AAAGTTAAAA TTGGAACAGG NTTAAGCAAT
GTCTGTCTTT AGTCACAAGT NAATATATGT GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CTAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GTATACATAT
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAAACCT AAAGTATAAT AAAAAAAAAA AAANTGAAAA GCTTCAGCCA
GAGGTCACAA TGCTCACAAC TCATTGACCA AACTATCTC ATACCCGINT TAGAGCANGG NGCAGGAAAG CAAAACCAT
CTCTTACTG TTCCTGGNA TACAAGTTCC ATGAGGGGAT GCAATTTNIN TCTTGNCAC TCTGTGTCC TCAGGGTATA
GG

SEQ ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCCAGAAGC CTGTCTCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA
AACTTCCCAA CAGCAGGGCT TTGGCCAAGC CCTGTGNTTC ACAAATTCGC AACACAACAA TCAGATGGCA CCAGGGACTG
GCAGCTCCAC TGCCGTCAAC TCCTGTTCTC CTCAGAGCCT GTCATCCGTC CTGGGCTCAG GATTTGGAGA GCTTGACCA
CCAAAATGG CAAACATCAC CAGCTCCAG ATTTTGAGACC AGTTGAAAGC TCCGAGTTTG GNCAGTTT ANCAACANCC
CAAGTACACA GCAGAATAGG TACAAGTCAA CCTACAACT ACTACTTCT

SEQ ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CGCTCTGTG CCCAGGCTGG AGTGCACTGG CGCAATCCCG GCTCACTGCA ACCTCCGCT CCCGGGTCA
AGTGATTCTN CTGCCTCGGC CTCCCAGTA GTTGGGATTA CGGTGCACA CCACCGCACC CGGCTGATTT TTTGTATTTT
TGGTAGAGAT GGAGTTTCAC CATGGCTGGG CTGGTCTGA ACTCTGATC TCAGGTGATC TGCCCGCTC AGGCTACCAG
AGINCTGGGG TTACA

SEQ ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGGCCATGT GCTTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATG
CAAGACCTGA GCTTAACCGC ATAATTAGAA CATAATTTN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA
TCTGCAACCC AATTGTCTA AAAAGAACT TAGGCTTCAC ATTGTGACA TAATTTCTT TAAATGAAT ATAAATTTT
ATTTTINATA TTTGTAGAGC ATAGGATGAT TGAATCCAG TTGTGTTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG
CCGTTACTAC TCTACAGAAC GCGCAATAAG TCA

SEQ ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCATAATTA CATGTTTATA TTCTATTAGT TGTAATTATT
TTTCACTAT CCTCTCATTA GAATGTTATA CCTATAGAGC AGATACCATT CCAGTTTAA TTTTGTGCCC CGACTCCTAG
TAAGTACGTG ACCTATTACA GGGAACTTAA AACAAACAA AAGTCTGCTG AGTCTGGGAT GTTTTAAGGA TCGAAGGAAC
ATGTTGGTCC AATTGCTT CACAGAGGGT TACCTCTGCT TTTCTACGA ATGTGGAATT GCTCCCATGT GGATTTTAA
GGAATCCAG TCTACCTCA GGGGAAGGNC CACATGTAAT GCCAGAGTC T

188

SEQ ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGAGCG TGTCGAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG
 ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCCT TCTGAAGCAT TCCAACATCG TCGTCTCCA CGACAGCATC
 TCCGAGGAGG GCTTCCACTA CTTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA
 CTACAGGAG GGTGATGCCA GTCACTGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGGTCGTC
 CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TTGATATTTG TGCTAATTC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCCTC ATGCTGTAA
 TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA
 CAATTATTGG AGCAAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCAG ATCACGTGAG ACTTTTTTGC
 TATCATGAGA ACAGCATGGG AAAATCCAC CCCCATGATT CAATTACCTC CCACAGGTC CCTCCCAGGG ACATGTGGAG
 ATTATTACAA TTCAAGATGA GATTGGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

SEQ ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAT AATAGAGTTT AGTAATATGG ATGAATATA GATAAATATT TAAAAAGCAG TTGTATTTTT ATAGCCAGC
 AAGATAAAGT TCAAATATGT ATTTTTTATA AAGATGGATT TACAATAACA TCAAAAATTA AAATGCACCT TGAAATAATA
 AAGACATGTA AACCCTTTTA TGAGACAGA TTTTTTAANG CATTTTTAAA AATNCTTTTT CATTGACAAA TAATTATCCN
 TATTINTGGG GTACACAGTA ATGTTTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT
 CAAACACTTA TCATTTCINT GTGTAGGGG CCATTCAACA TCCGCTTCT GGCIA

SEQ ID NO:488: (Length of Sequence = 323 Nucleotides)

CACTGCATTA ATGATTGENT TAACAGTATA TAAACAAGGG CCAATGGTTT TTTTACTAAA GTAGGTCTGA AAGATCAATA
 TAAATACTAA TGGGGGCAGG GAGGAGTGT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGTCTGTC CTATTATTAT
 AATTGTAAA AATCTTAACG ACGCAGTGAT TCGAGTTTC GTAACITCAA TGATGTGTTA GAGGACAATG CATCTTGGTT
 TGAAGAATTT GCTGTATCCG AAGGCCGGA AAGTACTOGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCCCTA
 CCG

SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TTACCTTTTA CTCTGATCAT AATCTCCAC CTGTCTAAGA GGTTATTTAT TCCTTATTTA GAGGGCCTCT ATTGCCATGT
 GCCTGGAATT ATTATATGCT CATCACTTTA TGAAGAATAA AATTGTCTT TCCTGCTTTA AAGTTACATT CGTCTTCCG
 CTCAAATCCT GATCTGGTCC ATTAAAGAGT GTTCGCAGAC AAAGTTTCTG AAAGATTAGA GAAGAATCCC CCCCAAGATT
 GCCCCAACAC TGAACACAG ACAACACTA TTTTATTTAA ATAAGGNGAC AGCTTTCTAA AAGTATACAT TCCTTAATA
 AAAATA

SEQ ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACCTGCAA GTTTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTCTC ATCTGTATTC
 CCTTTCTGC AATTATTTTC TTTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAG CTACAAAAAT
 ACTTAATATT TTAATTTGAA CTCTGC

SEQ ID NO:491: (Length of Sequence = 347 Nucleotides)

189

CCTGTACTTG TGTCCCTCA TTCACTTAAT TATGATACTT GCCTGGCATC TTGCAGGTTT CTGATGCTGT TACCCAGTA
 TAGACCAAGT GCAGACAGAA TTTCATTTCT GCTTTATTAA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA
 ATTAATTINT GGCAACAAGC TACTATATTG GCTTGCATGT CACTTTCACC TCTCTGGGCA TTAGTTTINCT CTAATATTTA
 TAAAAGAAGG ACATGACTTT CTAAGGTCC TTGCAGTAAT TATGCAGTTC TATTCTAATA GATGCTTAAG CATAAAACCC
 ATTTTAATAC TGTCCAAGG ATCCAGG

SEQ ID NO:492: (Length of Sequence = 320 Nucleotides)

GAATTTGGNT CCAAGTTTG GACATTGCAT TTCAATTAATA CGTCCCTTAA GTTATTTTAA ATCTGTATTT TCCTCCTCCC
 TTTTGTGTC TTGTAAATCT CTTTTGCTG TTGTTTGGG TAAAGAAAC CATGTTTTTT TCGTCTGTG AGTGGCTCCT
 GTTCAGAAIT TACTGATTT CATCTGCTGG TATCAITTAG CATGTTGCTC TGTCGCGCT AGTACTTTAA ACTAGACGTT
 AGATCTAGAG ATGTGATCTA CTTGGTAGG ACTTTGTCAA GAATACTTGT AAGTAGGIAT TTAGGTACCA GGGGNCACAT

SEQ ID NO:493: (Length of Sequence = 339 Nucleotides)

TGCCAAGTTT GCTGGAACAT TATCAGATGG CTTAGGGAAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA
 GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCCGG CATCCATGGC CTGGCTCATG GTATCAITGG TGGACTGACC
 AGTGTATATA CTTGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTGAG CGGTTTCATA TCTGGCCTTG GAAAGGGCT
 TGTGGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTGTCATCAG AAACAGNCCA GCGGTGAGA GACACAGNCA
 CACTTCAGCG GCCCCAGGN

SEQ ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCCTT GGAAAGTAAT TAGGATTAGA TAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA
 GGAAGAGAGA CTTGAGCTGA CACGCATGTA CTTCCTCTCT TGCTATGTGG TGCCCTCAGC CATGTTAGGG CACAGCAAGA
 AGGCCCTCAC CAGATATTGG GGTGGTCTTN GACCTCCAC CCTCCAGAAC TGTAAGAAAT AGATTTTTTT ATATATTACC
 CAGTCTATGA TATTCTGTTA CGGNAACAGN AACAGACTA AGACAAGCTT CTTAACAAA TTGANAATAG AGTTTAAAGA
 TNCAGACTTT CATTCCTTT AACAGGGGCC AAGAATATCT ATTTCA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGTGGCC CGCTGGCGT CGGTGGCTC CGCTCCTGCT CGCAGCCCT GTGGTCAGAG
 CTGGATACAA GATTCAAGAC CCTTCNTTG CTGTGACCC GCTCCAGGT GGAGCCACAG ACACCCACCG CCACCCGGC
 TGGGTCTGCT TCCTTCTCTG TGCTTTCCC TCCAGATGC GGCCTCAGAC CTAGAAGCTC AACCCCTTA TGAGGGCCAC
 GTCTGGGGT AGCTCCTGAC CTNGACCTT ATGTCCAAAT TTCACACCA TGGTTTTTCA TTTGACCCGG CCCCTTCTCG
 CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCTTAGTA AATGCAATTT TCGAACAGGC CCCATCTTC AACTGGTATA GCATCTTCCA CACCTGTAG CCTTCAAACA
 TCACCTGTAA AAATACGCC CATTCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGAACCT CTGACAGTGA
 CGGACTTTAA GCTGTACTTC AAAAATGTG AGAGGGACCC GCATTTTATC CTTGATGTTT CCCTTGGAGT GATCAGCAGA
 GTGGAGAAGA TTGTGNCAC AGAGCCATGG AGACAATTCC TGTGGTATAG AGATAGTGTG CAAGGATATG AGGAACCTGC
 GGCTTGCTTA TAAACAGGA AG

SEQ ID NO:497: (Length of Sequence = 273 Nucleotides)

190

GATTTATTAA GTATCCCCGA AAATATAAAC ACAAAACCAAT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT
 AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGGCAAGGGA
 GCCCTAGGGC GAGGGGAAAG CAGGGTGTGG GCAGCGAGAT GGNTOCNGG GTTTAGACAC TGCTGGCTTC GGNCCCGGCC
 GGCACCANGA CTCTCACTTC CAGTGGGAG CAG

SEQ ID NO:498: (Length of Sequence = 319 Nucleotides)

ATTCCCAAAA ATAGAGTCTG GACCTCTTAC CGCTACAAAT TCCAGGTCT CAGGTACAGC CTGAGAGTAT GCAGATATAA
 TACACCACAG ATGATTCTCT CCCTTTTTIG TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GAATCTCATT CTGTACCCCA
 GGNVGGAGTG CAGTGGGCTG ATCTGGGCTC ANTACTTCTC CCGCCTCCNG GNTTCAAGCA ATTCTCCTGC CTNAGCCTCC
 CGAGTAGCTG GGNCTACAGG NGCACACCAC CATGCCCATC CAATTTTTGG ATTTTAAGTA TAGTTGGGGT TTCACCATT

SEQ ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGTGAAT GACGAGTTGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAAACCTGC
 ACATTGTGAC ATGTACTCTA GAACTTAAAG TATAATAATA AAAAAAGAGA ACCTTTAAAA AAAAATAGAC TGCCAGATAG
 ACTAATAAAT AAAAAAGAGA GGTGAAATA ATCATAAATG ACTAAGGGGA TGTTACCCCA CAGAACTACA AAAACAAAC
 AAAAAAACCT CAGAGACTAC TAAACACTC CTATGCACAC AAAGTAGAAA ACCTAGAAGA AATGGGTAAA TTCTGGAAA
 CATACANCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG
 TAATAAAA

SEQ ID NO:500: (Length of Sequence = 474 Nucleotides)

TTTTATTTTT TTAAGTCTGTA CTGTTTTTNA TCTTTGATG ATAAAAATGA AAATGCCAAA ATGAGGGTGA GCTTAATTTA
 AAGTATAAGC GTAGTTAGCA GCTTTTINCTA ATCACTCTCG TCCATTTAAA AAATAATCCT CATAGGAGTA TAAACAGAGG
 AAGGAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTTT ACAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA
 GCTCCTCCG TGTTAACCTA CAGGTGTCT CCCCTCCAAA AAAAAGCATC TTTTAGGAAG AAACCACCTT AACACTACCT
 TTAGANGATT GAACTTCCAG GGATAGGTTG TTTGAGAGAA TCACCAAAAG CCATTTTTAA ATGAATTTTT AAATTACGGC
 TTTCTCATTC CTATAAATAG TGTAGCAGCC ACCTTCCCTC TACTATGGAA CTTTTAACCA ATAATCCAAG TCCT

SEQ ID NO:501: (Length of Sequence = 378 Nucleotides)

GTGGTGGCGG GCGCCTGACC TCGTGATCCG CCCGCTCAG CCTCCCAAAG TGTGGGATT ACAGGCGTGA GCACCGCACC
 CGGCCCTTGT GTACATTTTT ATAAGAGAAT TTTTTTAGCT AGGAGTTCAG AATTTTTTAA GTACCATTTG AATGATCTTA
 ATTTTNCITT CATGACAACA CATTCAAAA TGAATCATGC TTATGTACTA AGAGGGAAAA TGTATTTAAG NTAAGGGTGA
 GAGACTTAAG TTATAGGTGA CCTTAGAGAC CTAAGGTGAG AGACTTGACA CATGGAAGGA GTAACATTAG GSTCTACCTC
 TACCTCAATT TAGTTAGCGA TTTACTACAA TTTAGAGCT AACAAAAGTA AAAATAAA

SEQ ID NO:502: (Length of Sequence = 448 Nucleotides)

TTTTGGAGAT GGAGTCTTGC TCTGTTGCC AGGCTGGAGT TCAATGGCAC AAACCTGGCT CACTGCAACC TCCGCTCC
 AGTTTCAAGC AATTTTCTCG CCTCAGCTC CCGAGTAGCT GGAATACAG GCACACGCCA CCATGCCAG CTAATTTTTG
 TATTTTAGTA GAGACGGGGG TTTCACCATG TTGCCAGGC TGGTCTCAA CTCCTGAAC TGGTGATCC ACTCCCTCGG
 CCTCCCAAAG GGTGGGATT GCAGGCGTGA GCACACGNC CAGCCATGAT CCTTAACTT GTTTTAAGAG GTATAATAAC
 TGGAAATCAT GATGCTCTT AAGGAATACC AATTGGATGT ATTATGATG TATTTAATTC CATCCATATG NAGTAGAAAC
 AGTTTTCAAT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

191

SEQ ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTCCATT TTCAGAGAGC TCCGATGGAA ATTCTATGA ACTAATTCTC CTGCACATAC TTTGGTACAA
 GTGGGCTACT GGAGCCACCT TCCTTCGTTT AATCAAACAG CATTTATTCA GCTTATTTAA TGAACACTAT CCAAGATACT
 TGGGGGACAG AAATGAAAAG ATGGGGAGAC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA
 TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCGTAG AATGAGTGTG ACAGCTCCTA CCTGTAAACAG CTCTTCAAGC
 TCCTGCTGGA AGCGGTCAGT CAGCAAATCT ACTAGCTGGC TGGGGGCAAA AGTCCGCCCG GCTGGAGGAA AGTGAATTCC
 GGGATTTACA GAGCAGGTAG AGGCATGCG GCCCAGCCCT CAAGCA

SEQ ID NO:504: (Length of Sequence = 248 Nucleotides)

TTCCTCTTCT TTCTTACCAT GGAACGTCC TTCTCAGGGG ATTTTINAGGT CTCGGTGTIT CTGTGTTTCT NAATAGGCAG
 TTTCTGCTG TCGGCTAAGG GCTTATCCAG GNCATATCC AGAGCCCTGT AGGGGTGCTT GGGGCTTTG TCATCTCTGT
 CGCTGGGCAG AGCATTCTCA GGCATCTCCT CTGTNACGAT GTCCACCTGC TGGGCAAGGG CGATGTCTTC GTGCTCTCC
 GTGGGCAA

SEQ ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTGC CCAGGCTGTT CTCAAACCTT TGAGCTCAAG CAGTCTCTC ACCTGTCTCC CAAAGTCTG GGATTACAGG
 CATGAGCGAC TGINCTGGGC TTAATAAATT TTAAGAATT TGTGTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT
 TTATTGACAG ATTTTCTAGG GTCATCCTG ATGACAATCT GNVGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG
 TTCGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAGGC CCTGTAGGC AGTAAGGATG CCAAGGACAG
 AATAACTGTT CTGAATGTG CTAATAATGC AGCAGGCATT CAATAAG

SEQ ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTTTAGCTA TGCTATCAA AAGCCTGAGG AAACAACCAG GTCCCCAGAT GAAGAAGATT ATGACTATGA
 GTCTTATGAG AAGACCACCC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA
 GTGACAGTGG CTACTCTTAT GAGACCATG GGAAACTAC CAAGACCCCT GAAGATGGTG ACTATTCTTA TGAAATTATT
 GAGAAGACCA CACGGACCCC TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAGACC ACCAGCCCCC CCGAAGTGAG
 TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG
 ATGGTTGGCC ACACAACCT

SEQ ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAAACTATT TTACTTAAAA AATATTCTAT TACTTCAATG TCATGTCGTG TGAACGAGGA ACTCAACATG CTTATTINCC
 TTTGGTTCCA AGAAAAACCC AAGTCTAACC AAATGTATGC CACAAGGAAC TGCCAACTGG GTTAAAGCTT GGTATTTTCC
 TGGTTATCAC CCTATTTCCT GGTTAGGAC CTGGGGTTTA ATAGAGACAT TTACATAAAA AAGGTATTTG GTTAAACAA
 GAAATATGCA TGCNCTTCCT TACCACCTTC CTGGGAAAGA ACTGCTTTTT TTNCPTTCIT TCTGTGAATC TTGTTCAAGA
 CATCTGTAG TTTAGATATA TGGGCTGCTT CTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA
 TTCTATAAAA TGAAGA

SEQ ID NO:508: (Length of Sequence = 308 Nucleotides)

CTGTTTAGAA AAAAAAGTGC AGCTCACGT CAGCACTCAT TGAATTTTGC ATAAACATGC TTTTGGAGGC TGAAGCAAAT
 CTGACTGATT TTCAATGTGA AAATAAATA TAAAANCTGT TTTTAGAGTT ATTTATTAAC AGAACTAACA TCAGAATTAT
 TTGAATCACC AGAATAATCA ATTCTGGAAA AATCAGATT ATCAGATTAA TCTTTGGCCA ACAACTGTTT AAGAACAATG
 TTAACATCTG CATGSCAATG CTACATTINC TAGGATTTGA CATTTTCAGC AATTGAGGAA TTACTATA

192

SEQ ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTTTCAC TCTTGTGGC CAGGCTGGAG TGCAATGGCA TGATCTGGC TCACCGCAAC CTCGGCTCC
 CGGGTTCAAG CGATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA GGCACGCGCC ACCACGCGTG GCTGATTTTN
 TATTTTTAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCCGACCT CAAGTAGTCT GCCTGCCTCA
 ACCTCCCAA GTGCTGGGAT TACAGGCGTG AGCACTTGGC CCTGGCCGTG ACTGATTTTT TTTCATGTAG AATTGTCAAC
 ACGAGAGATC ACAAGTGGAG CACTTTGAAA GACCGTCGGT TGTGTGCACG

SEQ ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTCTCTCT TACTTCTCTT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCCTGCACA
 CGATATAGAA AAGCCATATT ACCTTCTTAA GACTGGTAAT CCGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA
 TTGCCCCAAC TCTCTGCTC ATCATTTGCC ACTGTTCTGT AAATTTCCCA GTCCCTCAC AGAAAGCACA TGGCACCATT
 TAAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CCTGTCCCAA TAGTGAAGTT CTCCACAAAT
 GGGGAGACTT CTCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTCTCTGC
 TTGCCCTTTT TCCGCCCTGG GTCAATATAC AAGCTTTCGG GGGACA

SEQ ID NO:511: (Length of Sequence = 354 Nucleotides)

AATACCAAAC TGAACAAACC TGCTCTTTC TGGTTAAAC AAAAAAAAAA AAACAAAAC AAACAAACAA AAAAAATCAC
 ACAGTTTAAT AAAGANGCAA CTCTTCTCTT TTAGGNGCAA GGACTACCAA TCTAATCTCT ATCTATTGAG CCCCCAAAAG
 CTCCCTTCAG AGCTTTCTCT CTCTTTATCA ACAGAAAAGT CTAGAATGAN TATTCACAGT TTTCTAAGAA AACCAGAAAG
 CCTTTAAGCA GCATTAGCTG GNCATATTTT TG TCTCTAT AGTATACCATA GATGAGTACA GCTTTACACT AGGGGGCTGG
 GAGTTACAGC TCACAGCAGA GACTNCTGGG GTAG

SEQ ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGTATATT ACAAAAAAGT TCCTGTACCA AAGTCTTAT TAGACTTAT TTTTGTTTT TTAATTTTAA AAATTTTTTT
 TGTTTTTTATT TTTATTTTTT AAATTINCCT TCCTCGTGGT GACTGTCTATG TGATTGTCTC AGTTTCTGGA CCAACAAAC
 AACTAATAA TTTTAAATCT GAAACAGTGA TTGTCCCTTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TGTACCTGT
 TAGCAAAAGT GTCACGATGC TGCACTCTA CCGAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCTGTGA
 ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAGACAA AAGAGSTATG GAAA

SEQ ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTNCTCTGG TGAATGTCTA ATCAGTGIGA TTTCATAGG CTATACTTAC CTTTTGGGGG CTAATTGCCA
 ATNATGTTTG GTCAGTATCC TTGCAACAA CAGAGTGACA GATTCTAAAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC
 ACCAAGGTTT ATGGGCTTGC AAATAAAAAG TCATAACTT CCTGCCCTA CTTCACCAAG TGAAATCGAG TTCTCACAC
 TTCTGCACAC AGCTCTTCA GGATCTTCCC TTCCCTTCAA GGCTGTCTGA TGTTCAGTTT AATTTGATTG TATTTGTATA
 AAGTGCTGAG TGTGAGTCC TCAAAGAAAT TTACTTTCAG TCTAANGCCC CCTTGGGACA AGAAAGTGGC AACCAGGCAA
 ATGATTGATT ACTTATTTGT TTGAGTATCA CTMTGTGATT GTCCAGGGC TGTATTACAC ATA

SEQ ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AAACGTTTCC TGGCTCTCTA CTAACAGTAA AATGTGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC
 ACGGACCTAT CAGTCTGCTC TGGGGTCTG ACCTGCTGGG TCCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG
 GAGACAGCTG TAATGTGTGC AGCTGTGAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCCACAT

193

TTCCCACTGT AAAACCAAAG GCTGCACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC
 ATTTCTCTCT TTAGAAGCCC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGSG TAACTT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAA TGATTCCACA CACGAGTAAA GAGATTTACC
 AGGAAGAGTC TTGTTTCTTA AAAGTTGATA CAACTAGTAG AAAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA
 AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG
 TATTGTTAAT TCATGCATTT NCTGACTCAT TTATTTATAC ATTGATACTG TCACTTATAA ATCAAATCTT ACAGGTCAGG
 TTTGTGCTA AGCTCAGGGG NTATAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCAGT ATAAGTGGGT
 AGATAGTTCT ATAAAG

SEQ ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TOGAGAACAT CGTAGCGAAC ACGGTGCTAC TCAAGGCCCC GGAAGGTGGC GGTGGAAATC GCAAAGGCCAA
 AAGCAAGAAA TGGGGGCAGA TGCTCCAGTT CCTTCACATC AGCCAGTGGC AAGAGCTGGC GCTCAGCCTC GAGCGTGA
 ATCAGAGCCT GTGCGAGCGG CANCCATTGG GCGCCTGCTG TTCCGAGAGT TCINTGCCAC GAGGCCGGAG CTNAGCCGCT
 GCGTCGCCCT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCGGATNAC AAGCGGAAGG CATGTGGGCG GCANTAACCG
 CAGAATTTTC TNAGNCACAN GGGTCCTGAC CTCATCCCTG AGGTTCCT

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGCGCCT GGAGAGCCAG CCTGCGAGGG TGGGCTGGGC GAGCCAAACT GCGTCTCTGG TGCAGGGCTT CCGGTCTCCC
 TAACAGACCT TATACGCTGA COGGGGGCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGGACGACC ACAITGCTCC
 AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGCG TGCCCTGTCA GCGCTCATG GTGCCAGAG
 AGGAATTTTA GTGGCAGCAT TCOGGCTGTC ACGNCACCGA AATTNCCAGG CCACTCCAAG TCAGAAGGGA CCACCAGGAA
 AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTTT TTTGTGACA AGGACTTAGA GGGGTTTGGG TCT

SEQ ID NO:518: (Length of Sequence = 465 Nucleotides)

CCTTCTCTGC AGATAGAAGA GCCAGAATGG GAAAAGCGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TTTACAGTGA
 TGGTGTGAGG CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG
 TNCCTCTCG GGGGCAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCTTGGCA GCAGCCTACT CCTGGATATT
 TCACTGATGA TCAGACATTA GACTTCCTTC TGCAGATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT
 GACTCTGGGC TCCATTGTTT GGAGTTACCG TGCTCCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTTACTT
 TCAGACCAGA AGTCTGTCTT TCCTCTCTG GGGCCGAAGG CTGTCTAGT TGCATCTTCC CAATT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GGCCGTGGT AACAGAAAAC TCAGTGATA CTCTGCTGTT GTTAGGTGT CAATATAGTC TTTCTGTAGG ATGGATAGCA
 TGTGTGAGAG GTGCCAAACA AGAATTTTG GGGTAGTAG TGTGTCTTGT GGAGGGTATT ACAGGACTGT GTAATTATAG
 GACTCTAACT TGACATGGCT TGGCACCAC TTGCAGCTAG TGGGTACAGG GTACAAAAGA TGTTAGAGAA AAGCTCTACA
 GATTACGTAC TTTCTGTCT TCGTATGCTC AACACTGTCC TTTGTCTC CATGAAAGAT GAAGGAAGCA AATTATGTA
 TGTTCTTTCT TTGACCTTCT TTAATCCTCT GATACTTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

194

CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA
CAATGATGTA CAATTACATC CTAATANTTC ANTGCCCAAG AGCCCTGTAG AACTATTGCA AGGCCCAGGN TTATCACAGT
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGGTTTAAC ATGAGAAGAG TAATCCATGC
TACAAGACGA GATTTTCATTT TACAGCTGTA GTAGCCAAGT GCTTAAAAGC TTGANICTGT CCGA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCTCG TCACCCATGC TGGAGTGCG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCAGGT
CCAAGTGATT CTCCCGCCTC AGCTCCCAA GCAGCTGGGA TTACAGGCGT GAGTCACCTG CCTCAGCCTC CCACAGTGCT
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTTGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTITGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

SEQ ID NO:522: (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTGTGCTG GTGAGGAAAT TCINTTGAGT TCTGTAGGAA TTTTATAGC TTGTTTGTCA TTCAGTTCTA
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT
AGGATCAGTC CCAAGAAGAA CTATNGGGTN GGGGAGAGGT TTTTCTTCCA CTTCTTGGGN TTCAGTGA CTGAGATGGA
CCTCTTTTTT CCNVTGGACA AAATGTCATC ACACCAACAT CTTATTG

SEQ ID NO:523: (Length of Sequence = 318 Nucleotides)

CCTGTCTCT ACTAAAAATA CAAAATTAG CCGGCGATGG TGTACGTTGT CTGTNATCCC AGCTACTCGG GAGGCTGAGG
CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG
AGCAAACTT TGTCTACAAG TCCTCTACG CTGACAGGTC CTCCTCACC TGAATCTTTT ACGCCAGCAG CGTCTCTTCA
CTGACGTNCT TCINCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGGCA GTGCTGGCTG CATGCAGTGC TTACTTTT

SEQ ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCTCATTGG AGCCAGGGTT CCAATTCTCA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGATT TCTACTGTTA
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TTGTGGACCT TACCGTTGAT GAAGATGGTA AATTGAAGTA GTAACAGTAG
AAAATTATGA AAGGAGTTTG ATAAAGGAA ATCTCTTAAT ATGCTAGAAA CTCCTCCTGC TTACTGGTAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGTG TGGACCTTAA ATTTAAACAG CTAAAGCTAT AGTCTAAGGA CAGTCTCAA TAAATACCTT TGAATTGTCA
TATGGTGCCC AGGAGGGTCT TGTGAAAGG GTTTCATGGT AGTGAAAGAT GTAATANCTC TTTTTCCTT TTAACCTTAA
GCCGTCC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGGTCACA CGGTGAAACA GACACAGTTA TATACAACAG GGCAGTTTTT TAAAAAGAGT TGCTCTCAGA CGCATTTTTT
CTGCTCCCTA AAAAGCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCCC TCATGGCCGC
ACCGTCCAGG GGAAGGGCTG TTAATAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAGG
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG
GAGAGATCAG ACAAGGAGTT GTTCTGAGT TNAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)

195

TTTGCAGTTT TACATTCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTTG TAAGAAATTG TGATTGGAA
 GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCTCT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA
 TCTGAAGGTC TATGGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTCGG AGTTAAAGGA GGATATATCT ATATNCTGGG
 AGATGAGCTG AATTCAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGTTTAAGC CAAATTAGGC TGGCATCCCC
 CACCACGGCC AACTAA

SEQ ID NO:528: (Length of Sequence = 482 Nucleotides)

TTTTACTCTA GCGTGAGGAG GGGGCTCCT AAGGAAAGTC ATGCTGGGTA AACTGTGCGA TGTTACAGAG CACATTGAGT
 CTGTGGTCAT CGTGGTTCIT CTATCTTCAC TGTCACTGT ATCTGTATAC ACATACTCAG TTCTTAATTG TAAGCTCAAT
 TTGGTATTA GCAAAGCAT CTGTCAATT TTCCTCAATT ACTCACACT CTCTTGCCCT AAATAAAACA AAGAAACAA
 GAAACAAGT GTGGTGTCT TACACGTCTC GGGAGTTCCT CGTCACTGAC TTTATATATA TANAANAAG AATGCACATG
 CGGGCCACGT TCACAGATAG ACAGATTCAC CCGAAATTGA GGAATGAGGG GCCTTAAAGG CTGCCANAA NCAAAATGGG
 GTGGAAATTA GCAANCCTG TTTTCCGGTC AATTNCCAAT TGTGCACTGG CTGCGTTGAG ACAAGNCCAT CTTCCAATTT
 CC

SEQ ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GTATCCTCCT CGAAGCAGGA ATCTAGTAA ATCTCATCTG CGGCATGCGA TTCCTAGTGC AGAGAGGGGA
 CCTGGGTTAT TAGAAAGTCC TTCAATATTT AACTTCACCTG CAGATOGATT AATTAATGGT GTCCGGAGTC CACAAACAAG
 GCAAGCAGGT CAAACTAGAA CACGGATTCA AAACCTTCA GCATATGCCA AGAGAGAGGC TGGGCTGGG CGTGTGGAGC
 CAGGCAGTCT CGAATCCTCT CCTGGTTIAG GGAGGGGAAG GAAGAATTCC TTTGGCTACC GGAAGAAAAG GGAGGAGAAG
 TTTACAAGCA GCCAGACACA GTCTINCAAC GNCACCAAAG CCTCCGTGCG CAAGCTTTCG AGCTGGGGGC TTTTCCAGCT
 TTCCCTCCAT TA

SEQ ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTTTTTAAT AATAGTCATT TAAAGTGGGT GAGATAATAT CTCATTGTGG TTTTNAATTG CATTTCTCTG ATGCTTAGTG
 GTGTTGAGCA TTTGTCATA TAACNCTGG CCTTTGTAT GTCTTTTTTT TTTTTTTTTT TTTTTTTTGA GATGGAGTCT
 CACTTTGTCA CCCAGGCTGG AGTGCAGTGG CGCAATCTTG GCTTACTGCA ACCTCCACTT TCTGGGTCA AGTGATTCTC
 CTGCCTCAGC CTCCCAAGTA GCTGGGATTA CAGNGCCCA CCACCAAGCC CAGCTAATTT T

SEQ ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCTTGA CAGTGGGGC AAGTCTTACC AACCTGCACA GCACATCCAG CAGGCAACT GTGGCTCAGC
 AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCACAGC GTTCAGATG TGTGTGGTCT GAGAGATAAA AGGACACAGA
 ACAAGATGAC TGTGCAAATA GCCAAGTGGT GGCAGAAGTT CTGCATTCC AAGAGATGAT CCACTCAATA ATTTGACGAT
 ACTAGTTGGC CAACATGCTC AGAGAAAACA GNCCTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEQ ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACCTC CGACCTTGG GAGCAGCCAG GGAGGAGTCA CTGTCCAGC CCCCTGGCCT AGGCACAAAG GGGTGGGAGA
 GACAGCTGGG CCAATATGGT CTATTACCG CTGAAACCCC GCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCC
 ACGTCCATGT CCAGGAGCCC CCTACTGTC CTGGTCACT GTGGCCCGGG GAATAATGGA GGAGATGGTC TGGTCTGTGC
 TCGACACCTC AAACCTTTTG TGAGTATGTG GGGAGGGGCT GTGGGGGAGG AGGGCGTNAG GGCTCTGGGA TCT

SEQ ID NO:533: (Length of Sequence = 378 Nucleotides)

196

GTAATCCAT GTGGCTGACT GGGTAACAGA TTGAAGGGT ATCAGAGACC TTCAATGTGT AGCTCATCGC AGTGTATTGT
 TTGTTGCTTG TCTCTGCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC
 TGAGTCAGGC ACATAGTAGS AATTCAGAAA GTATGTTTIG GATGTAACAT TOCTCCTTTT TOCTGGACAA AATGGCCTTT
 TGTCCGGTGC ATTGTCTTTT CCATAGAGGA GGGGTTGGGG CAGGATTGTN AGATGACTGT GTTTGAATCT TCAGTTAGCT
 AAGACAAGGA TACGTNITTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

SEQ ID NO:534: (Length of Sequence = 374 Nucleotides)

TTTTTTTTT GTCCAAGGTT TATCAAATTA ATTGATTTTG GGGGCAAGA TAAAAATTTT NATTTGATTA ACTTTCTCTA
 TTGGTTTTTG TTTTCAATTT CATTTATTTC TTCTTTTATC TTTATAATGT NCTTACATCT GCTTGGTTTG GGCTGGGCAC
 AGGGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTTT GAGACCAGCC
 TGGCCAACAT GGCAGAAACC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCTTAGC
 TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGGCAGAGC TTGC

SEQ ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TTCCAAGTCC CCAGGAGGGC TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT
 TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTTN AAATTCACAA AGATTGTTTG GCTTAATGAT TTCTAAATGT
 ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAAATGGAA AAGCTCAATT CAGCAAAAAA CAGATCTGAT
 GGGATTGGT TATTCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA
 ATAGAATGGA GCTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACCG ATTGCTGGAG
 GAGCTTGA ATGTAGTCAG CCGTTTCTTT TGG

SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCTTTAGC GCTGTTGATC AAAGAGTTCC AGGCCGGGCG TGGTGGCTCA
 TGCCGTGTAAT CCCAGCACTT TGGGAGGCTG AGGTGGGCAG ATCAGCAGGT CAGGAGATCA AGACCATCCT AACACGGTGA
 AACCCCATCT CTAATAAAAA TACAAAAAAT TAGCCGGGCA TGGTGGCAGG TGCCGTGAGT CCCAGCTATT TGGGAGGCTG
 AGGCAGAAGA GGAATTCCTG CAGCCCGGGG GATCCACTAG TTCTAGAGCG GCGGCCACCG CCGTTGGAGC TCCAGCTTTT
 TTGTTCCCTT TAGTGAGGGT TAATTTGAG CTGCGGTAA ATCATGGGTC ATAGCTGTTT TCCTGTGTGA AATTGTTATC
 CGNTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCCGT TTGGTCACA CTCTCACTA GGTGAGAACC TGACCAAAAA TGTGGAATTA TTAAACAAAA
 TGATGGGAAG CCAATGINCT GAAACTGAGC TCTTGCACTA GGCCCCACA GACCAATTA AAATGGAGTC ACTAGTGCTA
 AATGCTTTGG AGTCAAACAG AAATGTTAAA GAAGATAGAT CCCAAACAG AGCAGTGTTT TATTTTCTC CAGAAAACAG
 GAGATTCCAG CATAATAAGA AAGTCTCCTC TGTGTAAACC CTTACAAAAA AGTAACCTGA AGTAACCATT TTTTTT

SEQ ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCTTCATGG GGTCTTAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGTTAC AGAAGTGCAT
 TCATACATTT CACAAATGTT TCAGTATCCT CTCTCCCCG ACCCCAGCAT GAGCTTAAT TGGATGTATT TATCTTTCA
 CCAGCATGCC CATGAAGNG CTAAGGAAAA CATTTACCAA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAACTTTTTC
 TCTTCCTTTT TCATGCTTTT TTTTAAAAA AAAACACGGA GAAAGCGAAT AGAGAGGAAA GAG

SEQ ID NO:539: (Length of Sequence = 362 Nucleotides)

197

CATGTCATAG TGGCCTGCTC TCCTAACACA GCACAATTA GGGCATATTT TCATGATGGT CTATCACTGG ATTACAACAC
 ATCTCTTCAT TAAAGTCTTG GGAAAGAGGC TTCAACTTIN CTGTGTGAG AAAACTTCAC AGGTGTGTAA AGTTTGATCA
 GTATGTATAA TATATTINAT TACATAATAT TNATTINAT TTTTCATTT TTTGCATACA TAGCAGGTGT ATATACTIAT
 GGGTTATATG AGATATTTTG ATAAAGGCAT GCAATGTGTA ATAATCATAT CAGGGTAAAT GCAGTATCTA TCCATCACCC
 CAAGCATTTA TCCTTTGTGT TACATACAGT CCAATTACAC TC

SEQ ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAGA TAGTCATCCA
 AACATGAACA GATGAGAAGG CTGTTTTC AAGAAGTGAA AGTGACAGAN TATTCAATGA ATCTGAACAC ATGAAGATAC
 TGAGACACCA GTAGTTCAGC AATAAGTGA GAGAAACTA AGCAAATGAG AAACCTAGGA ACAATTATGC AGCAAGAAC
 AACTGGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA AACTAAGTA TCACAATCAA ATTCTGATTT GTAAAAATAG
 AGGTATGGGA AGGGTACANG TATGTTGTG GGGCAAAATG GTGAGGAGAG CTAAACCCT CTCTTCCTT AATGAGGAAT
 TAAATAATCC CATTAA

SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTTC CAGGCCITCG AAAGGCCATC CTGTGGACAC ATGTAAAAAG CTGTCTTGTG GGCCCGTTAT TCCCCTGAC
 CCGTCTGAGT GATCACCAG GAGCGGGCG GCAGCAAGCA GAGCTCACC GATTGGGAC AAGGATTTTA AAGGCAGCTA
 CAAAGCTGAG CTCTATTGTC TGATGATAGT CTCTGTTCAG CTGTTTAAA TGACTGTCTG ACTCACCATG GTAAATTTNC
 ACAAATTA AACAATTTT GGGTGTGCA ACAGTGGTTC TCATCTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT
 ACAGGAATT GGGACTCTCG G

SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TTGTGTGTTT CTACCTTAAC CAATACCTCC TGGAAAAAG AGGTATTGGT ATAAAAATA ACCATACCCA AACATTCCCA
 CAACATGACC TTAATAAGCT GGTGCACAGT AGATTATGGC AGAGGAAGA AATTGACTT TAGAATTAGA GAACTTAGG
 TTCAAATCTC AGCTCTGTCA TGCTTTGGT GACCTTCAGT AAGTCCATT TNCITCATCT GTAAATGGG AATAACATCT
 ACTCCACAGC ATCATTAGAA AGATTAAATA GTGGCTGGC ATGCTGTCTC ATGCTGTAA TCCAGCACT TTTGGGGAGG
 CTGAGGTGGG GCGG

SEQ ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTTGTTTGC AATTGACAAC ACCTCATTA TGTAAAGCCC AGTGACACTG CTGTCTGTTT CAAGTCACCT TTAATTACA
 CACGTGCIAC TTAATCTTA AAGCAAAAT AACATTGGA CTGGTTTACA TTCAAGCTA CAATATGGAA CCATTGTAT
 TGGAGGAATG AGTTTAAATAT GCATTGTAAA ATAAATTAG GGGTACTTT GCATTCACAG CGCTTATGT AATTAGGTC
 AGTCAACTGT AATGTTTCAG GTTAATGCT TCCATGGATG TATGCTGTGT AATAGTGAA CTTACATATC CCTTAATACA
 TCTGAATTAT TACATAAATC CTTAATATTA

SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTGAG ATCCGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGAAG CGTCTTGATT CCTGGAGGAA
 ATCTCCGAAG TGATGTGTAA CCCTGTGTGT CGCTGCACT TCGGCCGAA CTGCCCTTGG TTCAGTCCCC TGTTCCGTGA
 GGAGGCGGG ATCATGTAAC AGTGGAGCAC ATCGTCCCG GCTTGGACGC CTTNACCTT TAAGTGTTC TGATTTAGTT
 TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAAGTGC TTTTAAAGCC AGGTTCTGA ATTTGGTAGG CATGGACACT
 CCCAGTAG

SEQ ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCTATTAC CTCTGGGCAC TGGGAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTTT CAGTGTATGC CCTTTTGGAA
GTGTTAAACT TTTTTTTTTT TTTTTTGAGA CAGGNTCTCA CTCTGTGGC CTGCTGGAGT GCAATGGTGA GATCGTAACT
CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA
CCATACCTGG NTAAATNTTA AAGTTTTGT AAAGATGGGG GTTTCCGAT GTTGCCCAAG CTAGTCTCAA ACTNCTGGGC
TCAAGTGATT TGCCCACTT GG

SEQ ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGTAATGC CAGCATTTTG GGAGGCTTGA GGCGGGAGGN TCCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC
AGTGAGACCC CTATNCTAT TINATTTAAA AAAAAA AAAAGGGGTC ACGTTTACTG CCACCATCCC AGGCAGAAAG
ATGAAGCCTA GAGCCTCTCA CTGCTTCTTA GTGGGTCTTG GGTGTAAAT TGCTGTCTTG GGTATATTT TTGGCAGAAA
GCATCTGGCA TCAGGCACTG GTTCTCAAG TCGGGCCCC

SEQ ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAGAGTT TCACATAGTG GCTCAGTCCA GCCTTGTTGG GATCTTGCCG GGGCTGGGG CCGGTGGTCC GGGGCCTAGG
GGGATGCCIN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGA CAGAGGGGGC TGAACCTGCC
TCAAGGAGGC TCTTATTCAA GAGCAAGTCT TGCTGGCTTC TNCTGAGGCT GGGGACCAG TGCCCTTTG GCCAGCCAGG
ACCAGCAGCN CTNACCCT GCTGAGGGGC AGTTTGGGTC AGGGGGGNC CATAGAGG

SEQ ID NO:548: (Length of Sequence = 311 Nucleotides)

GAGACAGGGC TGTTTCTGC ACTACACTGG TCATCTGACC AACTTTCTGC AATGCTAAGA AGGTATCTT TGACCAACA
GCAGTCCACA TACAAGTTA AAAGGGGCC TGTTTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC
CAAATATTT CAGTTTATCT TACGGCTGA CTCTATTCT CCCACACTGT TTCCTAAGA AGGTCCACAT TATTTTGGT
ACTAGCCTAG TTAAAGTGA GATACTGTGG GCAACTTAA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

SEQ ID NO:549: (Length of Sequence = 387 Nucleotides)

TTTATTTTGG TGTAAGACA GGAAGCTGA AAATACACTG TATTTAAAT TTNCTTGGT CCCCCTCACA TTGTGGAAC
CCCCCCCC CAGAGCTAAT CTGTTCAAAC TCAAATACTT AAAAATTACA GCAGCCAAAC AAAAGCATGG GGGAAAAAA
AACAAAAACA AAAACCAGAT GGAGAAGTA GCCTGGGCA GTAGTGTAC TTGGTGTGA CGACTGAGGT GCTGAACAGG
AGCTTCGTG TCTGTTTTT TCTTTCTTT CTCTCTTTCT CTTCAGAGAG GGGATCTNGA AGTAGCTGGG TGTGTCCAGT
TTCATGAAG CTGCTTCAAT AGCTTGGCTG AAGGAATTTT GAAACINGG CACAGGAACA CGGGTTT

SEQ ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCAAC TCTTACCAA GTAGGGGCC TGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCTGGGTGA GCATACCTAC
TGGTAGTGGC TCCGTGATTC CCTGGGAGG GGCTCCAGA GGTAACCAAC CAACCTGTG CTACTGCTAT GACCACAGT
CTGCTCTGC TGCCCTCAA CTGGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCAGCT TCTAGCACTA CGCAGTCACC
ATATAAGAG GAGCCAGTC TCTCTCTTT GTGAACCTT GACCCCAAC TCTTACCAA GTGGGGCCCC CAGCTTGGG
CAGCAGACA GTGGCCCAA CCCCTAGGCT GAACATTCCA GTAGCAGCTG CTCGCG

SEQ ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTTTNTGG TGAGCCGAGA TCACGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG
CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCCTGCG GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG

199

GCTGTGTCTAG GGCTGCCATG GGCAGGGCCG TGCTGGCTCC CTGGCCCACT GGGAGGAGGG TCTTCCATGG GGACGGACTT
CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAGG CCACACC

SEQ ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAACTGAC AAGAGAAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG
ACCAATCTTG TCCGCTACGT TCGCAAGGA CTGNTTGGC TCGCATCGA TGCCCACTG TTGTAGTGGG TGTTCTCAGA
TCTCTAGCAT CACGACCCAT CACTCTACCT CTACCAGCGC ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACTG
TCTCTTTGGT TATGTTTGT TTTATGCTTC TTTGTTATC TGTAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACIT
AAGGGCAGTG TACG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAGGGGA AAAATCACAA TATGTGTTCT AGACAATATT GGTTTAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA
GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTTGCAATGT
GTCTACCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAACTG CTCCTTTGCA AACAAATGA
AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAA GNGAGAAAAG CAAATCTTC
TATTAGTCTC AAGCAAGTCT TCAGATTTAC ACACAATCTA ATGGAGGCAT C

SEQ ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTTT TTTCAATAAG GCTATTGTAT CAGCCTGTC TCTCGCTGCT AATAACGACA TACCCAAGAC TGGGTAAATTT
ATAAAGGAAA GAGGTTTTAT GGAATCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGGAGG CAAAGGAGAA
GCAGAGTCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAGGGGA ACTCCCTTT ATAAAACCAT CAGATCTAGT
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CCTGCCCCCTC ATGATTCAAT TACTTCCCAT TAGGTCCCTN
CCACAATACA T

SEQ ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCAGCC CGGCTAATTT TTGTATTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC
AGGATGGTCT CGATTCTCTG ACCTCATGAT CTGCGCGCCT CGACCTCCA AAGTGCTGGG ATTACAGGCG TGAGCACCGC
GCCAGCCCA ACACATGGTA TTTTCTGTCA TTTTCATTTA GTCTCTGGT TGCTGTGTA TGGTCTCAGG CTTTATTTAC
ATTTCTCCGA TTACTAACAG ACTTGAACAT TTCAGCACAC TTTTAGGTT ATTGAATAAC CCTTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CTTTTTTGGT GATINCIAAG CTCGTCTTIN CTTATCCTAT ATATATATGT GGTGGTTTT NATTTTAGGA TTTTAAGGTT
ATCCCTAATA AATTTTGAGA TGTGTCCAT AGCTAGCCTG TTGAGATCTT TTATATCAA AAGTTAATAT CTGTGGATTT
NTAATCAATC TTTCTACATA TTTAACAAAG TCATTAGCAA AATATTGAAC AAAACCTGTT ATTCATATCC TTAGATACAG
AACATCAATA TCCTGAGATA CAGTACATCA TCAAAATGTG GTCCCAAAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTG ATGGCATGGT ACATGTCCTC
CAGGATGTCT TGCTCAAAGT CCTTGCTCC ATTCACACCT TTCAGATTTT TGCGAACTC CTAGAGACAG GCCAGTAAGT
TTTTTCCCT TGTTCAACA CTGAAGCCCC ACCTAAGGAA CTCTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG
CGAAAAAACC CACTTCCCCA CCCAGTCCC TTTTCTAGGT TTGGGCCAGC CCTTCCTTGA TTCCCTTGA CAGAACCCCA
TCCATCATGC CCACTGGAAT CCTATGTCC

200

SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GGGCCAGGCG CTGTGGCTCA CGCTGTAAT CCTAGCACTT TGGGAGGCCA AGGTGGGCAG ATCACTGAG ATCAGGAGTT
CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAA ATTAGCTGGG CGTGGTGGTG TCGCCTATA
ATCCACAGTG CTGGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTN CAGTGAGCCA AGACTGCACC
ACTGCATTCC AGCCTGGGCG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCGG CTGGAGGAGA ACGTGAACCG CCGCTGCTG GAGGAGGGCA GCGTGGAGGC
GCGCACCATC GAGGACGCCA TTGCACTGCT CAGCGTGGCG GAGGAGGGCG CCGACCGCA CCCAGAAAGA CGCATGCGGG
CAGCCTTCAC AGCCTTTTAC GAAGCCAGC TGCCGCGGCT CAAACAAGAG AACCCCAACA TGCGGCTNTC GCAGCTGAAA
CAGCTCTTCA AGAAGGAGTG GCTCCGCTCT CCTGACAA

SEQ ID NO:560: (Length of Sequence = 304 Nucleotides)

CAATGTTAT TGGAGTTAT CTAGAAGGCT CAGTAACCAG AACTTCCTTT CATTCGTCTT TTCTTTTCT TTTTTTTTT
CTCTGAGAC AGTCTGGCTC TGTCCTCCAG GCTGGAGTGC AATGGTGTA TCTCAGCTCA TTGCAACCTC TGCTGCCCG
GTGTGTGCAA TTCTCTGCC TCAGCCTCCC GAGTAGCGGG ATTACAGGCA CGTGCCACCA CACCTGGCTA ATTTTTTTTT
TTTTTTTTTT TTGTATTTT AGTAGAGCG GGGTTTTAC CATGTTGGCC AGGCTAGTTT CAAA

SEQ ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCCAA ATATATCTGT AATTACATTA AGTGCAAGTG AACCAAAACA GTTCAGATAA AAGACAGTAC
CTATTCATA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GTACACATGT CATATTAGGA GGTGTGCAAT
AAATGATACT TTATTCGAA GATTAACATA ATTCATACCT AAAAGGATCA AGAACTAGAA TATTAAAAA NTAGAATGTG
AATGTTCTG CAAGTTTGA TAAGAACAAG CCCATAAATT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC
TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCCTGCGTGC TGTGTCATCC CATGGCGGAA GAAGGAAGGG CAAGAGTGGG TGAGATTGIN AGCAGGAGAG
AAGGCTGAAC TTCATATTTT AACAAACCCAC TTTCATGATT ATNATAATCT TCGCATTTAT TTTTTCGGT CTCTTCATGT
NCCTAACIT TTCTCTGGG TTTTGGTCTT TTGCTCTTC ATTTTAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTTGT GAGAAACAGA AGCTGAATAT CTGATTTGA TTGCCCACAC AGGCGTTCAA TGGCTTAGCA GTGCTAAAGA
TTTATTTTTA TTTTTTTGGG CTCTGGGCTG ACATTGGAAA TTCTNCTGAA TGAGAAAAAC CATCTCAAC CACTGTTTTT
TAACACTGAG TAACTTTGGA AATTAACTTT TGCCACAGAC TTGAAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG
GTACAACAAC ATAATATGCT AAATTCATTT CAATAAAAAC TAAACTTTAA GATTGTCAAG CTGCTTTATA TACTTCTGT
GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAAATCC

SEQ ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGTACTGTG TGTTCATAC ACATGTTTCC TTTAGTCTTA AATCTGGCT CATGGGGTAA ACACTATTAT AATCTCCATC
CTCCAGATGA GGAAAGTGAG ACTTAGAGGT TAAGTACATT TTAGGATAAA GTAGGGTATT TCGATAAATG TTTCAAATGT
GTTTCTGGTC TCTGAGSACT ACACTCCAG GCTGCTGGGG ATACAAAATA CCTTTCTTT ACCATAGGAG CACTTGGGTA
GAATATTTGC AGAAACAATA AACTGGCTGA TATTTAAAGT TCTCTTCAGC TCTGACATTC TATAATTTCA TTGACCTCT

201

TTGCATTAA TTATGTIGAT TTTCCTTTCT ACCCCTTGCT TAGCTAAAAA TATACCCCTT CINTGTCCAT GGACAGGAGG
ATGGG

SEQ ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACCTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG
GTCAGAGGCT AGAAGGGNGC TCACAGGNTT GCCTGGGGAA GCCTCGGCC AAAACCTGGC CCTINGCTCCA GCCCAGAGNA
CCCACCTGGG CATNAGACTT GCGGCAGCGT AGGGGT

SEQ ID NO:566: (Length of Sequence = 275 Nucleotides)

TTGGAAAAA GAGAAAAA AATTCTGCTT CATTTACGAA TGTTGCCAA GGAGGCAAGT TTTCAACTGA AAACAAAACA
TAAAGGTCTA TGTTGATGCA GCCAAATGTT TCTCCATTTA GAAAATCATC ATAAAAGGTG GCAGCACTTT TTTTGCTTGT
TAACTATATT ACTTATAACT GGCTGCACCA ACATTTTCATC TCAATTTTIG GAGTGTCTTCT TCTGATCAAT CCTAAAAGCA
ACACAATCAT TTTAGAGGTT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

CGCTCGTNG TCCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGCTCTGAT GAAAAGAAGC CCCTGGCACA
AAAGATTCCA GTGCCCCCTGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCTT AGAAAACCAG CGGGACGGCC TCCCTGCTGA
TACCGTCTAT AACCTTAGGG GGNCTCGGG CAGGCAACT CATCTGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC
AATGCCACAC CTAATGGTTA CCCTTGAGG GCATTTCTCC AGACAGAAGC CCCTTGAAGC CTAGGTAGGG CAGGATCAGA
GATACAACCC GTGTTTGTCT CGAAGGGCT

SEQ ID NO:568: (Length of Sequence = 368 Nucleotides)

CTGGTAACTT CCGATTGNN TTTCOCGCC TCANCCCTTT CCCAGGGCTA TTCTCTCCC ACCTGCTGCC AGGCCTTTCC
CTGGCCATCC TGTGTTAAAT GTCATCCGC CCTACTGTT ATGTTCTCCA CAGCACTTGA ACAAGACCCA ACATGCCCTT
TCACITCAAG GTTTATTCTT CTATTAGTTT TCCAGAGTC TGCTTCCCTA GTGTCCATCT CCCCTGCTCG AATGCCCTTT
GAGAGCCAGT GCTTGTATTT TGGTCTNGT GGTATGGGCC TGGCAGATAG TAGGCAGTCA GCAGATATTT ATGGAACAAA
CAATGAATT TGTGTGACTA TAGTTCATTG TTCATAGTTC ATTCATAG

SEQ ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCACITAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GINTCAATA AATGCTAGCT CAGGGCAGAG
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTACTCAATA AATGCTAGCT
CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GTGCTCAATA
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCCTA
AGGTGCTC

SEQ ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATTGAAATGG
CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTGTA AACGCATCCA
AGTAAAGCAG TAAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AAACAGAACT TCTGGAATA
AAAAAAATC ACTACAGGAA TTTCATAATG CAATTGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEQ ID NO:571: (Length of Sequence = 338 Nucleotides)

202

AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGCT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT
TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CTTGGAGCCT
TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAAGGGA CTGINTCTTT CTNCTGGGTC TCTGTAGGAG TTTGAAGGAG
AAGACTG3CC CCAAAGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACCTACTT GGATAGGGAG AAGGNTCTA
GGCGGTATCC ACAACTT

SEO ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTTCCAG AAGTGACAGC ACAAGTCTGA GTTGTCTGTT GGCTGGTGA CCTCAGACAC ACTAATTGA ATTGAAAGCT
AAGAGTAAAA ATTINCTGGT TACAGGCGAG TCATACTCTT GCAAGTAGTT AGCAAAGGGA GGCCCAAATT CTCAAGGTTG
TTGATGGGGA ACTTGCCACT AAGAGAAGGC AGAGAGGTCC CTAGTGGGTA TATTINCTGC CRAAGCCATT GCCAAAGAAG
AGGAACCACA GAAAGAGAGA CATCATGACC NGGAGAAAAA TGTGACTAGA CATGCTAACC TCCAGGINTT TATATATGAC
TTGAGTCTGC TGTAAATTGGC AGCAGAAATC CAAATTTGT ATGGGTAGAC CACAA

SEO ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGTT TGATTTTINAG GACGATCAGC ACAAGATCCC CTGCCACTGT
GGAGCCTGGA ATTGTGGGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGGA GTCCCCCTAC CCACAANTC
TTCCCTGAAA GNAATNGAGG GGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGGTTGG GGCTGCCGCG TGACCCGGAG
CCCTGGAGC AGGAGGCTGG GGCAGAGGGC CTTAGGCCAA GCCACCTTG GGCACAGGG ACAATCTCTT TCCCCACCAC
CGCCCTCAG GCTGGCATCT CTGCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGT

SEO ID NO:574: (Length of Sequence = 373 Nucleotides)

CTAAACAGAT TTAATCCCT CCCAGCAATC CAGATTAAAT TAATATGCTT TCTTAACGGC ATTCCGCAIT TINTATTAA
GCAATGAAC GTCCATCCCT CTCTGATAAA TTAGGGCAAA AAAATTCATA TGTTTAGGGC ATAGGGAAGG AGGAGTTGTT
GGCTGTTAA AAAAAGAACA AAAAAAGTA CCGCAATGG CGTTTCAAAG TCTAGACATC TTCATCATCA ACACAAACAT
TCCTCTTAC AAAGGGACCT CAAGTAACCT TAGGCTGGAG GACCCACCTG CGTATGTTT TINTCTCAT TTTCTTTAC
CTTCCCTCA GGCCACCCAA CCCACATTCA GTGGCCCAAG TCAGTGGGG TTT

SEO ID NO:575: (Length of Sequence = 431 Nucleotides)

GCCCCATTA CTTCTTTGTC TGCTACCACA ACAAGGTATA TTAGCCCTTG AAATTAAAGA TGTGTCTGTC CCAGTGTGTC
TGTCTTCAC CTAATGTCAT ACAGTCATAT TCCAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTATATAC
ATGAGCTCCC GTGTGTGGAG TGAACATAAT GCAGATATAA AATATTGGG AAAAAATTC ATGTGTACTG AACATGTATA
GACTTTTTIN CTGTGTATCA TTTCTTAAAT AATACAGAT AATAACCACT GTTACATAG CATTACATT GTGTAGGTA
TTATAAATAA TCTGTACATA ATTAAACCTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTTTATAT
CAAGTACTTG AGGCCTCTGC AGATTGTGTT G

SEO ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAAACA GCCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CCTGCAAGCG CGCCTGTAAA CAAGTCCCCG
TGGGTTTTTG GGAGGTGCGC CCACATCTAA GACTGTGCGC CCTGCACTCC CTCTGGATGG CTGCGGAAT TTGTTCTTCG
CTGATCACC AATTCTGGAAG GGTGGAGAGA CAGTGGCTG GACAGCTGCC TGATTGGGCC ATGACCCCTC ACGGGTGTCT
GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGG CTTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG
GGACCCCTGC TNCGGTCTCT TNCAGGGGCC TTGTTCAATG ACATACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC
GGAACCTTCG

203

SEQ ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAAT GGCATATTTG AACATAAACT TAGGGCAGAT TTTTACTACT TTTGAAAAAA TGTGGGAAAA TATTTCTGTA
 TGAAACGTAA AACAACTTTT AATTTTTTTT AGAAGTTGAG AGGATTCTAT TTTGCAAAGC TGTATTATGA AGCTAAAGAA
 TATGATCTTG CTAAAAAGTA AGTACAACT GTAACATGTA TTCTTTTTTT AAAATCAATG CCTTINCTCA TTINCTTCTT
 TGAAATAGGT AAAAATATGT CCTTAGTAGT TCTTCTAAG TGTATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT
 AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGTAATT AGTGTTTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA
 AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CGCTACAGGG GGGGCTGAG GCACTGCAGA AAGTGGGCTT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC
 TGCATATATG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGGTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT
 CAGAAGAAGC CTGTTTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAAG GCATATAAAG CATATAGACT CTTGAAAGGA
 CACAGTTGTA CTACACCGCA ATGCAAATAC CTGCTTGCAA AATGTTGTGT TGATCTCAGC AAGCTTCAG AAGGGGAACA
 AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA
 CTCCTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GTGGGCTGCT TCTGGAGTCC ACATTGCTAA ATATTATGCT GCAGTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG
 GCTGTGGCCC ACTCAAATCT CATCTTGAAT TGTAGTTCCC ATAATCCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA
 ACTGAATCAT AGGGCAGTTA TTTCTATGCT GTCCCTCAIAA TAGTGAGTTT TCACATATATC TGCTGGTTTT ATAAGGGGCT
 TCCCCCCIN CCTTGCTCT GCATTTCTCT TTCCGGCCAT TATGAGAGGA AGGACATGTT TGCTTCCOCT TCTGCCATGA
 TTGTAAGTTT CCGAGGCTT CTTGAGCCAT GCTGAACTGT GGAATTTAAT TAAA

SEQ ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTTACTATT AGGAGAGTCA AATCATTTAT TTTACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG
 GTCTGCTGTG AATTCTTCGC AGTGATTGAG AAATTCTGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG
 GCTTTAGGAG TAAGAGAGAG AAGGTCGCG TCCATGTGG GAAAGAATAG ATATGCCAC AATAATTAGT CTATTACTTG
 TTGAAAAGG GTGATTTCTT CGTCATTCA AAGTATTAAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA
 AGNAACTTCT TACAGTATGA TTCCTAAAGG ATTATGGATG CCATTATCCA TTTTGAGTT GGTATTGAAG CTTATC

SEQ ID NO:581: (Length of Sequence = 449 Nucleotides)

CTGCTCCGTG GCTGTTTCAA AGACTGGCG AAAGGCTGTC CGGAGGGCAG ACCAGGTGCC TTGCCGAGA GAAAACACCA
 NAGTCTCTG TTGCTCATTA AAGAAGTTT TGGGATGGGA GAGAATCCAG ACCATCTTGG GGCAGCCANG CCGTGCCTT
 CATTTTTACA GAGGTAGCAC AATTGATTCC AACACAAAAC TCCTTCCOCT TTTTAAAATG ATTTCTGTTT TAATGCCATA
 GATCAAAGGC CTCAGAAACC ATTGTGTGTT TCCTCTTTGA AGCAATGACA AGCACTTTAC TTTACGGTG GTTTTTGTTT
 TTNCTTATG CTGTGGAACC TCTTTTGGAG GACGTAAAG GCGTGTTTA CTGTTTTTT TAAGAGTGTG TGATGTGTGT
 TTGTAGGAT TCTTGACAGT GCTGTAATAC AGAOGGCAAT GCAATAGCC

SEQ ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGTG GTACTTGACG TGGCAGGGTC CCGGACAGGG CCGGTCAGT GTGCTGAGCT TGGTGGCGGG CACTGGCTTG
 GACAGTGGCA TGACCGGAGG GAAGTGGCGG CCGGAGGGCC TCAGGGGGCT GAGCACGTCC TTGCAGAGGG GCGGGAACGG

204

GTNCTGCTGG TACTGGCCAA ANACCTCGAA AACAAATGGC TNGCTCTTGA TGTACAGGTG GCGTTTATTT TCATGGATT
ATACACACTG GAAAAGCCTC T

SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTTAAAGC AGCCATTCTT GCCAAGAGC CAACATTGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG
GGCTCCAAGT GAGGCTATGG GGTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAAGTAGTG AGCAGCCTGA
GGGACTGCT GGATGTAGTG AGAGCATTGG TACCACTTGG TGTTCTCTGA NNITGCACTAG CTGCAGCAGC TAGTGCAGCN
AAATTCTGTA ACTGCATTGC ATTCAACCTT CCCATTGGGT GGAGGCTGCT CAGGCTGTTG AGGTTCCAG AGGAGGCAGT
CTGCTGAAGG AGTGCTAAAT ACTNGGTCC AAGAGTATTT AGACCAGCA GGTTCCTCCA CACAGATGCT GCGCTGATT

SEQ ID NO:584: (Length of Sequence = 441 Nucleotides)

GTGTGTTTTA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCCAG TGCCCAGCAC ACAAGAAATG TTCAATAAAA
TAGGAGGCAT AATTGTCCTG TTGTAATACT AGATAACCTT TTAAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTTG
GAGGAGCCTA GGCAATCTAT TCCAAAATTA AATGTAAGGA AGGTACATGA GTAAGGATG GAGTAGGCC TGGACCAACA
CTAGAGCTCC AAATTCCTA AAAAGCTTGA GCTTCTTTTA CTGTGGCCAC GCCTATAATG GGAATAAATC TGGTCTCTCA
AACAGTCCCT CCCCTCTCTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGCTTCTG TGNITAGCTC CTCCCCATCT
TNGACTCTCA TCCCATTCCC TCTTCTCTAC TACCCATTCA G

SEQ ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TTCAGCTATT TNGTCTTGC AGAGTCCAGT TAACAAAGT GAGTNGTGT ATAAAGAAAG TNATTTTTTT
TTTTTAAATT ATTCCAAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCTTG CCTAGGGTA TCACTTTGCT TTGGAGCAG
GAAGTAAGCA CTTTTAAAGG GGGCTTAACA TGAATGGCAC ATGGGGTCCG GGGAGTAAG CAAGTGCAGC ATCTACATGT
TAGTTTGGTA CCTATCTAC TAGGTAGTCA AGGTGGTGAC TGCTGTGTC TTTGTGGGG ATGTGTACTT TGGGGTGTGA
AATTGG

SEQ ID NO:586: (Length of Sequence = 431 Nucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATINTTC AAGAAAAGA GCGGAGAGAG AGAGAGCTGC ATGAAGCATA
TAAGANCGCT CGGTCCCAGG AGGAGGCAGA GGGGATCCTT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTT
TOGAACGCTT GGAGATGCCA AAAATTCTGG AAAGAAGCCA TTCAACAGAG CCAAATTTAT CCTCCTTCTT GAATGACCCC
AATCCCATGA AATACCTGCG GCAACAGTCA CTGCTCCAC CCAAATTCAC TGCCACTGTT GAAACCACCA TTGCTGTGTC
CAGTNTCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCTNCAAG AAAACTGTG ACTTCCCAA AGCAAGTGCC
TATGCTTGAC ANCCAGGCC TTAATTCCCA G

SEQ ID NO:587: (Length of Sequence = 338 Nucleotides)

CTCAAGCAAT TCTCCACCT CAGCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCCAGCTA ATTTTGTATT
TTTGTAGAG ACAGGTTTC ACCATGTCG CAGGCTGCT CTCAACCTCC TGGGCTCAAG CAATCCTCTT GCTCGGCTT
CCCAAGTGC TGGGATTACA GATGTGAGCC ACCGATCCA GCCCCACACC CTCATTTATA CCAATTACCT GCCCAGTAAC
TGTGGACTTT TGCTTCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTTATAGC TTGTCAGCAC AGTCCCAAAG
TTCAATATTT CTGCGGGC

SEQ ID NO:588: (Length of Sequence = 277 Nucleotides)

205

AAGAACATTT AAGTAGTTCA TACAAAGAAA TATAAATTGT NCTTAAATAT ATCAAAATAT ACTCACCTCA TTCATAGTAA
 AAGAAATAAA AAACGTGCT CTGATGACAT TTTTCATCTA TGAGATTTAC AAAGNTCTAA AAATTGAGAA TATACATTTT
 CTATTGCCCTT TGGATGGCAA TTGGGCAGTA ACTATCAAAA GTATAAATAT CTATACCCCTT TGAGGTGTCA ATCTCATTTT
 AAAGAATTTA TTCTTCAGCT ATGTACATAC ATGTAGG

SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GTAATGAATT ATAAGAATCT GAATTGAGAG CTAATAATATC TGGGTGTGAG GCCTACTCTG CCACGNTTTT NPTATTGCA
 AATATTAGAG CTGAAGTACA TGACCTCAAA GGCTCTAACC AACTCCAAA CCTACAATTC AATGGCTGAC TGATATACAT
 TGTATACTCT TTAATAACAA TTAATAACAA AGANGNTAAT AAATGTGTCA TGTATTATAC AACTATTATA CAGTGTGTG
 TGTATATATA TATAATNININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCATC
 AGACACTTIN CATTTCCAG GTCCATCAGA TGG

SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CTCATATACA TAAAAAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA
 TCACGGAAGA GGGCGCCCC AGCTCTCAAT CTTACACAA TCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCCCTCC
 CGCCCACTTC CGGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGT
 ATGAGTCCTT CCTCGCGGG GCTCGGTGGG TCCTGAGTAT TCMTGGCCG GATTINCTGA TCCGTCTGCT CCAGGTGAGC
 TNGGGAAGGC CCCAGGAAA GGGCCANAAG GGCTTTGCC AGGG

SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTGA ACGTTTAATC AATAGATTTT GGAAGATGA AAACGTCTA GAGATGAGTG GTGGTGATGC
 CACATAACAA TGTGAGGTA CTTAATACCA CTGAAGTGA TGTTTAAAT GGCAAAAGG GTAAATTGA TGTATGTAT
 ATTTTACCAG AATTTTTTTT TTAAGCTTA CTGCATGGG ACCAAGCGTG GTGGCTACA CCTGTATCC CAGCACTTG
 GGAGGCCNAG GCGGTGGGT CACTTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAACCCC G

SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTTTGGTTT CTACCCATCA TCCTCTCTC AAAGGAACCA GGGTCTCTG GGGATTGGC TGATGCCAGG GGATGGAGAG
 TGTCAATGG NTCTGAAGG GAGGCTGCA GCATGTGTGT GGCAGGTCAG ACAGACCCAA GAGCCAGCTT GGTGGGGCAT
 CCTGGCTAC CCTGGGACA CAGTGAGCGC CGAATAAAT AACATCAGGA ATGNTCACA ACGCAATGAG TAAGGGGAAT
 CTGAGTCTAT AGGGATACAG ACCCAGAGGT AAATNGCCAT GGCCACCAC TTTCTTACAG GAGAATGTGA CTAGTTGAGC
 GTAGGAACAT GGAACAAAT GTTAGAGGT GCTGACAT

SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTAAT TTAACATTTT TTGAAATTTT ATATTGCAGA AGTTGTACAT ATTNCTGTT
 GTGAAATTAG AAAGANTGA CAGGCAAGGA GGGTGGTCTA CAAAGCACTC CATAGATCCA CCATACTGAG ACAATGCTTA
 ATGCTTTGAT GAATTTATTT ATTNATACT TTCTATGCAT ATGCAATGAT TGTATAAATA CGNATGCATG GTTAAATAGA
 AATGGTTCTC CTTGGTGTTC TGTATATCCA TTTATGTTG TGAAGTAAAT CCCCAAGAG GTAGGTTTGC TTTTGCTGA
 GGATCTTTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

206

GAACATGGCC GTGAAC TGCT CGGAGATGCG CTGGAACAGC TCCTGGATGG CCGTGCTGTT CCGATGAAG GTGGAGGACA
 TCTTGAGGCC GCGGGGCGGG ATGTACACA CGGCCACCTT CAGTTTGTTG GGGATCCACT CCACGAAGTA GCTGCTGTTT
 TTGCTCTGGA TGGCCAGCAT CTGCTCGTCC ACCTCCTTCA TGGACATGCG GCGCCGGAAC ACGGTGGCCA CCGTCAAGTA
 GCGGCCGTGG CGCGGCTCGC AGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

SEQ ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAAATGAAG AGTATTATAC AAGACAATA GTCAATAGTC TTCAAAGTGT CAAGGTCATG
 AAAAATTGAG GAAGCATCCC AGACTGAAGG GGAATAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTC TGGATTAGAT
 CCTGGAATTG AAAAGAACA TTCATGGAAC AACTGACAAA TTTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG
 TGTTAATCTC CTGGTTTAGA TCATGCTTA ATGGAATGT TTTGTACTAT TTTTGTGGA CTCTTAAGGA ATGTGGGTGG
 AGGACACGGA TGAGACCTAC TTGCATCGAC AACAGGCGT TCTACGGACA

SEQ ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCC TOGAAGGCCT G3AGCAGCGG GCGTGTGACA CCTGAAGCCG
 CCAGCTCGCC ACAGGGGCCA GGGAGCTGGA GATGGCCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTGTTC
 CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG
 CATGTTCGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTT CATCTGCACA TGAAGGACCC
 CCCATACAAG CTTGT

SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCCTGAACA TCACAACTT GGTTCCTACC TACCACACGA GTAGCCAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT
 CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACCTTAA GTGTGGAAAA GAGTTCAGAT
 CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAACAT CTCTGATCCC TCAGTCCCCA ACCCTGGAGC TGTTCATTT
 ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTTA AGGTTCNCAA CCAAATTATT TAATCAGTGT CCCCCAATA
 AAATCACTTA TCCCATTTTA TTGCTAGTTT AGTTTT

SEQ ID NO:598: (Length of Sequence = 402 Nucleotides)

ACCACTACAC AATATATCTA TGTAACAAA CTGCATTCCT ACCCCTTAAA TTCATACAAA TAAAAAAAT TAAAAATAA
 ATAAAGTAGG ACAATCCCC AGATAAATAA ATTAATAAAT AAATAAATAA ATAAATAAAT AAATAACTTT AGCTCTTGCC
 TTCTCCTACA CATAAGTTAA TGCTGATGG GGTTAGTGGT TATGCTTCTG TAACTATAA TCAGATGTAC TCTTGACCCC
 AAACCTAGAT GCGATTTTNC GTATACTGGA ATCTTTGCTA CCTGTATATA AACTGTGGAA CTGAAAATGC TGCATTGGGA
 GCGATCTGAT AGGNTCTGTC CTAAGGGCT ACTCTGAGGG GCTCTAGGGG CTTAGTCTA CAGGCCCCA GGGAGGACTG
 CT

SEQ ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAAG TTTGGATTTT NTCCAGATG ACTCCTTGGG TGAATTTTAA ATCAAGTTAT TTCAACCATT TTNCTCATAT
 ATTTGCTGCA TCCCTATTCT GTTATTCAGT GAATACATGG GAGAGSTATG TNATTCTCAG CTCCCACAGC CCATAAGTCG
 GGGAAACCAG ACTTCATTCC CCTCTGCTCT AACTCAGACT GTGAGGTCAT TGAGGSCAAG ACTGATGAAT TGTTCCTCTT
 CCTATCACTG GTGCCAAGCA CAGTAGTTGG CATAAGAAG TTACTCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG
 GAAGNGGGA CCTGGGGGAA GAGGTGGCA TAAAGTGAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

207

CCGCCTCCTG GGTTCAGCA ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG GGACTACAGG CGTGGCTCC ACCACCACGC
 CCGGCTAATT TTGTATTTT NAGTAAAGAT GGGGTTTCTC CATGTTGGCC AGGCTGGTCT TGAAGTCTG ACCTCAGGTC
 ATCCGCCCGC CTCGGCCTCC CAAAGTGCTG GGATTACAGG CGTGAGCAAC CGCACCCTGC CAGCTGCTTC TATTTTAATC
 TGAAGTTGGA AACACCTTCC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACCT
 CAAATTTACT TAAGTTAATT AA

SEQ ID NO:601: (Length of Sequence = 319 Nucleotides)

AGTACTATTC TGCCATAAAA AAAAGAATGA GATCCTATCA CTGCAACAT CTGGATGGA ACTGGAGGTC ATTATGTTAA
 GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTGCTAAT CTCACTCATT TGTGAGAACT GAAAATTAAA ACAATTGANC
 TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGGG GCAGGGAATG GGGAGGTTA
 ATAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAGGGT GGCTATGGTC AACATAATT TATAGTACA

SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CTGCCAAGTG GGACAACTTT CTGGCTTTTG AAAGGCTCCT TCTTCAGAGC ATTGGGGAGT CAGCAATGTC
 CGTTGTGTTA AATCAGCTGC TGCCCATGAT TAAGCCTGTA ACCCAGAGAA CCAACGAGGA CTACAGCCCT GAGGAACTGC
 TGATCCTTCT CATATATATT TAINCTGTCA CTGGAGAGCT CACGGTAGAC AAAGACCTGT GTGAAGCAGA AGAAAAAGTC
 AAGAAAGCAT TGGCTCAGGT CTCTGTGAG GAATCTGGAT TGTACCTTT GCTGCAAAA ATTACGGACT GGGGACTCTT
 CAATTAATCT GACA

SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TTTCACCATG TTAGCCAGGA TGGTCTCGAT CTTCTGACCT TGTGATCCGC CTGCCTCGGC CTOCCAAAGT GCTTGTATTA
 CAGGCGTGAG CANCCGCGCC CAGCCAGGAT TATTATTTT TAAATCAGAG ACACTGAGTA CCACCTAAAG GGACTTAAAT
 TATGCAATTG GAATGAACT AAAGTGAATT GAACATTTAG TTTCATTAG ATTTTATTTT TCTGCCAAC TGTATATGA
 GAGTTGAGA GGGAGCCAG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TTCTAGAGTG
 AGTTAAATTT ACCACAGCGG GGCATATATA TGTATATATA TGATACCNIG TTTTATATA GCTCCTTATA GTTTTAAAG
 CACTTTGTAC

SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAT GATGAAAGAA GCAAACTTGG AGCATCAGAA AGGAAGAAAG AACATGATAA AATGAAAATA
 TGAGCTCCTA TTATGAACAT CGTATTACCA TTCATTGGA AACTTAATCG TATATTTATA TATAAGCATC CTTAGAGAT
 GCTGIGGGTT CAGTTTCAGN CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGTTCCTCAG
 TGCATATAAA ATTAANCTTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAANT GTACATACCT
 TTATTTAAAA ACGCTTTTAT TGCTTAAAN AGGCTAAATG GCCATCTGA GCCATCGGCT TTTTCTCTGG CAGAGGGG

SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCTTAGA AATCCTACCA CCTCCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TCGCTGATGC
 CTGCTTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAATA
 CCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GTGGACATAC TGATTTTAC CAATGTGTCT
 ACATACTATA TTAAAAACT TCCTACAAAG TATTGTCCCA ATTCAGTTCA TCTGAGGATG TGAAACACT ACAGTGTACC
 TTAAACATC ACATTCACAA CCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

208

TGCCCTTCCTT TCCTCAATTC GAGACAGCAG TATCATTAGT GTTGATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA
 AATCAAAGTT TACAGTAATA TCAAAGAAGA CTGGGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCCTAAAT
 TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTINCAGAAT CTCTGATTIT CCTTTCTGTA GTTGTCGAAG
 CTGTTGATTG TTGTTGCGGG TTCTACAGC AGGGAATTTT CTGACTATGA ATTTACAGC AGATTCCAGG NTTTTGTGA
 TAAGATAGGA TGGNTTTGCC NTGGGNCCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCCTT ATAAAGAGTG AAAGCCCTGC CCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NTCAAAAACA
 ATCCACCCAA AAAATGSCCT GCAGGGACAC AGTCCAGAG AAAGAGACTA TGTACAACA GGTACAGTAA GTAAGACCTG
 CCCACACACA GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC
 AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAAGTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG
 GGGGGACATT CAACAGTGAG TAGTAGTTTA GGGGAACAG CTGGCACCTC TGGCAGTCGC CTCAGAGGTC AANCCAGCGT
 NTAGGTTGCT TT

SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAAGTCTC CATCAAGTTT CTGCCCTCCC AACGTAATAT GGAAGTCGTT CTGGCTGTAG GACCCAGCT
 GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAG GGAAGCAATC GATGCTTTCA
 TCGAGGGTGA GGAGTGAAC AAGGCGAAGG TTGTAGCTAA GGAGTTAGAT CCCAGSTATG AAGACTATGT GGACCAGCAT
 TATAAAGAGT TCCTCAAGAA TCAGGGCAAA GTGACTCGC TGGTGGGTGT GATGTGATA GCTGCTTTGG ACCTGTATGT
 GGAGCAGGGC CAGTGGGGAC AAGTGCAATTG AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG
 TATGCAACTC ACTTGATCC

SEQ ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGAAGTT GTAGTGAGCC GAGATCATGC CACTGCACTC CAGGTTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAA
 GAAAGAAAA AGCATTCTCTG AAAGGAATAA AAAACAAATT GATAACATCC CCTAATCTCT AGTTGTTGGG ATGTAGTATC
 CTTCAATTTGA TCAGGAAATC ATATGATGTG CCTTAAATTA TTAAGTTGGC AGAATTGTG TGGTTTCATA ATGATGCTTG
 TAAGATGATA TTNTAATGGA AATGTTTTAG ACTATATCIN TTGTGTTTT TNCTGCTGIN TTTGTGTAAG GCTTAAANCT
 ACCCCCTTTA AAAACAG

SEQ ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GTATTAATCT TGATACIAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA
 ATTGCAAATA CAATAAAGT CGTGATTTAT GCTTAATGTT TCTGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC
 CTGGTTTGTC TTGGTTACAA CTTTGTGGC TCCAGATGCT AAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC
 GTGCCTCTCT CGCTTCCGAA AAGTTTMTTC TACTCCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA
 AGGAAATGCC TTTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC
 CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAACTC C

SEQ ID NO:611: (Length of Sequence = 344 Nucleotides)

TTTGGTACAG TAATTAGGTT TGGTTGATTC GGTATGGGG GTATACAGC ACATGCAAAC ACACACAGGG TGTGCGTGTG
 TGTATAGG GGCATATACA CATGCACACA TATACATA TGTATATAG GATGTGTGTA TATGTGTGTA TATATATAGG
 GTGTGTATGT ATCCTATATA TGTCCATATA CATGTATATG TGTATATAT ACATGTATAT GTACACATGT GTGCATATGT

GTACATATAT GTGTATATAT GTATATATCC CACATCTCCA ATTINCCAT ACGTATATAC ACACATATAT GTTATATAGG
GTGTACAGAT ATAGGATATG TGTG

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TTTCATAGA TGTTTAAGGG TTAAATGAGG TAATGCATGT CGAGTGCTCA GCCAACTGAG
ATTCAGGAAG CGCTCAATAG ATGCTGGCTG TCATTATTAA CTGAGTAAGT AATCCTTTTC CCACAGAAGC AGTAGAAGGC
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTMTTTTGT GTGTGTGTG TTGTTTAAAT
GAACIGAAAT GAGTTTGAGA GATTCAATATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAAGTTCA ACATTGTGAT
TCTACTCCAC TTCCGTATGA GATAAGTATA TGAGGGNGCT TAATCCCCG NTAAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTTATTTT TGTGGGIGTC GACTTCCAT GTGGGCTTTT TGGGIGACAC TCCCTTAAGG GTTCAGTTTG ACAATTCINA
GAGTTGTCTT GCAGTTGGAG GCCACCAGAG GTATCTAAGC TCCCTGCTTC CTATTINATA ATCCTCCAGC CCCAGCAGGT
CCACTCCTGG TTCTGTGTG TTGGCCCCG GCACAATCCC CACTGCTTTG CTAGACGTG TTTCTGCCAT GTGGCTTTGG
GCCTAGAGCT TGTGATAAT TGCAGCTTGT GGCAGTGGAA ATATGGCTGA ATGAGCGTCT AAACCCCTGG GINGGGGNC
TNAANINCNN GGGTTTTTAA AA

SEQ ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGTGTATT AACAAATAGCC AGGAGGTGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT
ATACATACAA TGGAATATTA TTCAGCTTAA AAAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA
TGTTTTGCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTAT ATGAGGAATC TAAAGTAGTC
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGGTTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTAA TGGCTATAGA
GTTTCAGATA TGCAATACGN NAATTTCTGG GGGATCTTT TGCACCACCA ATGTGCACCG TATAATTCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TTCTTTTACT GATTTTITAA AATGTGTGCA ATATCTTCAG TGAACCTTAA ACAATCTGGG GAACIGTTTT
CCTCAATTAC CACTTCAGCA ACGTTCATAC GAAATCAAGG CTGCGCTTCA TGTGAGTGT AGGNCAACT TTAACCTGAA
GGTTTGTGTT TGTCTCTAAC ATCTTCAGAG TGAGCTTTAG GGATGCCTGA AGGATGGACA GTACAAGCAA GCAGCTACTT
CCATGATACA GTGGGAAGAT AAAAAGGCCC ATTCAGTCCA GCCGTGACCT GTAAATCCAG CTGCGCCTCC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCOC CCCCCAGGTT
CACGCCATTN TCCTGCCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTINIATT
TTTGGTAGAG ACGGGGTTTC ACGGTGTTAG CCAGGATGGT CTCGATCTCC TGACCTGTG ATCCACCCGC NTGGGGCTCC
CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GTGGGGGTGC TGCCACCTC CCATTTCTTT GCCTGGGTGG TGGTGACCAC GGCGCCCTTG
TGTCCTTTCC ATTGGTTACT GAGGACCATT GCCCTCATGG GCCCAGGCCA CAGGCACCCA CCGTINAGCC TCACCTGCCA
CCTCTCTCCA TGTGCGCTTN TTGCCCCCTG GCGTGGCCTG GGCATGGGGG AGCTTATNTC CCGACCAGG GGCTTGGCCA
TGINTCCTTC ACAANCCCCA CTCCCCGGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCAGGAG
CCCTCCAGC CACGTGCCAG CCCATCCCAT CATCAGCACT TGGTTTAAAG CTTCAA

210

SEQ ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCCTGTA
 GTCCAGCTA CTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC
 ACTGCACTCC AGCATGGCG ACGGAGCAAG ACTCTGTCTC AAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTAGT
 ATTAGCAGAT ACATATTACT AGGTACCCCC CATGCTCAAT GAAGTGTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG
 GTGTGACTTC CTCTGGAAC GCAAATCTTT TT

SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAACG ACCCCACAA GGGGAAGGC CCCAAGTGGG CCCCTGCCCTG TNGTNTCTTC TGGCTCCAGA GATGTCTGCA
 TAGGCCTCAG CTCTCTACTG GCAATCTCC TCTTCATGGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTCTCTGTGT
 AAGCTTGCTC CCTGAGCCA CAGGTTCAC ATCTAAACCT CAGTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT
 CCTGGGGCAA GCCAGAGCAT CACCTGTGAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT
 AGTGTGTCCA GTATCCAGCA TGGGACAGC ACATGCATT

SEQ ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGTCTCTCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
 CTGCCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTGTG TGACTCTAAG CTCAGTGCTC TCTCCACTAC
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATGTCAGGTG TGCACCACCA TGCTGGGAT AATTTTTTGT ATTTTTTAAG
 TAGGACACGG TTTCACCATG TTTGGCCAGG CTGGTCTTGG AACTTCTTGA GGIGTAAATG ATCTTNCCTC ACCTTNTGCC
 TTCCAAGTG CTGGGATTT ACAAGGTTTT AAGCCACCG AATCCAT

SEQ ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GNTCTCTGGG GCAGGTGTTC TGGGATCCTG GACAGGAGGG TCAGGTTCGAT TTTAACCAG AGAGACCTGA
 TCTCATCACT GTCTTTTAGA GGGGAGAGAA GTTCGTNCCG GCCAAAGGGG ACCAGTGTGT AGAAGTGTCT CTCACGCTCC
 TTGGCGATGT CACTNGTGGT CTGGCGTIN ATGGAGCTTA CAGGGGCCCT AGGACCACTG CCCCCNTTGG CAGCGGC

SEQ ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAAA CTCTTCAAG GTAAAGCAGG ATGTTGGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA
 AAGATTAGAA GAATGGCTAA CTAGAATAAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC
 GAGAAGTACG TGATGCATGC ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGGG TATCAGTGAT TGAAGATCAA
 ATAAATG

SEQ ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGSIT TGTTTTATTT AAGTTTAATG TTAATTCAT GCTGTGTTTC AGTAAGANCA ATACAGATTTC TGTATCTGTG
 GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTGAGCGA GCGAAGGAGG
 GGAGGAGTGA GGGGAAGGAG GTAGGGGAG GGGGAAGGAG AAGAAACAAA AGANTTGAAC AGGCATGCAG GCTTTTCCAT
 ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTTG AACTG

SEQ ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGTTGGC CAGGTCTCGA ACTCCTGSCA TCAGGTGATC CGCCCGTTTC AGCCTCCAA AGTGTGGGA TTACAGGCTT
 GAGCCACCAG GCCTGGCCCG TTACTATTGT TATTTTAA TGCATTAGTA AAAAAAAA AAATTTTAAAT TGCTAGAACA

211

TTAAATATCA ATACCCACAT TAATAAAAGC TATTTGGGAG CCTTAATAAT TATCAATGGT GTAAAGGGGT CCTGAGACCA
 AAAAGTTTGA CTTCACCAGG TGTTTGAACA CTACAGATCC CATCTTGCCC ATGAAGCTTC CCTAGACATC CCCACCCAC
 CGTGCTCCNT TCTGCATCCT ACAATAGCAT CCACTGGTAA GGGCCACTTA TTTTA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GTTCCTAGAT TACTCAAAT TAGTACTCTT CCATCTTTTC TTGTGCTAT TCTTTTAAA TCACAAGAAG TCATAACTT
 AAGTAGGAAT TTGTATAATG TAACTTATG TGAGTATATT TCCTTACCAG CTCATAAAGA ACTATGTAAA CTGGAATGCA
 TATTTTTNAC ATAAAAATAG CAAAAA AAAANCAAAA AAAAAACAGT ACTGGCCTAA TACTAGINGA NTTACAGAAT
 ANGGGTAAAT ANTACATGNN CATCCTTACA GAGTGAGCAT AAACAATACA TGGTAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG
 ATAAGATCTG GAAGAATTCT TTGGATTTC AGACATAGGC TCTGTNCTC TTCCCTTACT TTCTCCCAA CAAATGGCAT
 CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAAGTGT GGGTGGGATC ACACAAGCAC CCTTNTGGCC ATTGCCCTTG
 GGACTGTGCT AGGTCAGACC TGAAGTCAGC ACAGCATTGG GTCTACCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGGG AGTCAGGAGT GCTTTGGAAC TGGAGGTTTG CTTTCCACTG ACAACATCCA TATCTNCTGC
 TAATGCCAAC ATGCTCCCAA GTGTCTTAGT GGGTCCACA AAGTGTATCC AGCCGAGAAG AGTTGCAGGG ACAGTCAAGA
 AACCAGAGGT GCTGCCACA TCCCATCAC TCCCTTTCCC AACTTCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA
 CCTGAGATAC TACTGTNATG GGTCCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGAAT ATGGGTAAAA
 CAGAGAGATG GCAAGGAGAC AAGCTGTNCC CAGACAGAGG GATGGGAGG

SEQ ID NO:628: (Length of Sequence = 310 Nucleotides)

TTTTTTTTTT TGAGACAAGA GTCTACTCT ATCACCAGG CTGGAGTGCA GTGACATAAT CATGGCTCAA TGCAGCCTCG
 ACCTCTCAGA CTCAAGTGAT CCTCCACCT CAACATCCCA AGTAGCTGGG ACTACAGGAG AGCCACCATG CCCAGCTAGT
 TTTTINACTTT TCTGCAGAGA TGGTGTCTT CCATGTGTC CAGGTGGTTC TCGGAAGTCC GGGGCTCCAG CGATCCTCCT
 GCCTCAGTCT CCCAGAGTGC TGGACCCACA GGCATGAGCC ACCACACTCA GCCCCAAAAT CCATGATTTT

SEQ ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGTGGAAA GGCAAAGAGT ACAAGTGAGC GAGCCCTTTT TGTGATGCGG TTGATCTGTT TACAAGGGGA
 CTGCCTAAAC ACTTTCCATT AGCCCCACT TCCCAACACT GTTGCACTGT TGCAGTTAAG TTCCAACAC ATGAATGCTG
 GGGGACACAT TTAAATTAGA GCAGTGATGA TCAGAAAGTT ATTGTGGA AAGGAGGTTT TATTTTAACT TAAGTAGCTT
 GAAAAAGCTC TTCAAGGAGT TGATACAAGA ACTGAGATTT GAATTAGAGG ACGAGTAAA GTGAAGAATC TCGGGGCAA
 GTCCAGGCA GAGGGAAGAG CAGGAAATGA TTCATCAGTA GACTTGCTCT CCCATTCTCG GCAAGGGCTA TTTCACATTT
 TCTTCCACTC TCTTCTCAG CACATCTCCA CCTGGGTTT CTC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)

TGGATGTGGT GAAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA
 GATTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCCA CTGCTGGGTA TCTACTCAA GGAAATAAG

212

TCATTACATC AAAAACACAC CTGCACACAT ATNMTTATTG CAACACAATT CACAATTGTA AAGATATGGA ACCAACCTAA
GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTTTNACA TATCAGTAAT TGTMTTATA ATTTGTGGTT TTNATGAAAC ATTGCTATGC ATTTATTAGG AAAAAGTGAA
TTTCCCAACA GGTGAAGTGA AAAGNTATTT TAACTATTAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT
AAAAATGTTT GCATTAATGN ATAAATTCIT CCNGCATTC CTGGGCCNGN TCTGGAGGTG G

SEQ ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACTT CAGTATTGGG ACCCATGGGA GGTTGCTCA CCCATTACCAC AGGACTAAAT CCAAGCTTGC
CAACTTCTCA ATCTTTGTC CTTCTGCTA GCAAAGGATT GCTACCCATG TNCATCACC AGCACTTACA TTCTTCCCT
GCAGCTACTC AAAGTAGTTT CCCACCAAC ATCAGCAATC CTCTTCAGG CCTGCTTATT GGGGTTGAGC CTCTCCGNG
TCCCAACTT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCCTCT GGAATCAAGA
AAAGACCCAT ATCTGCTCA CAGA

SEQ ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCCGGCA CAGCGCTGTG ACTGCCCAAG ACCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTCAC
TCAAGSCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNTCCTTC CTTCAGTGCA GTAAGCTCCC
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC
TGTTCTACCA TCGCTGAGCT GGCAGTGAAT CCACCCGGCA AATCCCTTC CACTNTCCC TCCCCTCTN CCCAGGCAGG
GTAGTCTGTT NCCACCTACG ACGTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEQ ID NO:634: (Length of Sequence = 28 Nucleotides)

ATCAGTGGTC TACCACAGNT TAAGTAACGG GTCATATT.3 GAGTATCACA CATCTCAGTC TGTAGAAAT TAGGNACAGC
AATTAGGAGT CATGCACATA TANGAGATGT AATCCCAC.2 TTGACTATA GCTACTCTT GTNTTTTACA GAAAAGACTG
TGNGGAAGA AAACCCCTTA CCCINTNTT CAGGGAGAAA CTNACANCAC TCANCTGCCT GGCAGTGAAA ATNIGGCATC
CAGTCCACTT TACCATCAGT GTTTAAGGAA ACCATCTCTG GTAAGC

SEQ ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT
TTCAGGGCTC CCCACCGATA GTNATCGGCA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCCTGA CCACTCCGAT
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCTCCACTT CCATCTGGG NGTGCCCTC CCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TCCAAATGG GCAAAGATC TGAATAAACA TTTCTCCAA GATATGCAA CAGCCAATAA
ATACATGAAA AGATGGCCAA CATCATTCAT TATGCTTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCACTTGTCT
CCCACTAGGN TAGCTACAAT CAACAAATG GACAGCAAAA AGTGTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT
TGCTAATGGA AACACAAAT GATGGAGCTA CCATGAAAA CTGCTTATCA GTTTGACCTC GGAAGTTAA ACACAGAAGT
ACCACATGAT CCAGCAATTC CACTCTAGG TATATACCC AAGGACT

SEQ ID NO:637: (Length of Sequence = 384 Nucleotides)

213

TTCAATAAAA TTTTACTTAA AATCTGTAAC GCTAGATATT GACTATCCTT AGTTGAGTCA CTGAGGTTTA AACACAATGG
 TAAGTCTTAA AGTCTGCTAT TTACAGAGCA TTGAATCTGT ACCAATTTGC AATAGAAAGC CTTCAAGTATG CAAGAAGTTT
 GCATGGGTAT TAAGAACACA GCTTAAATAA GGCATTGAT CTAATCTGCA GGAAGAATTT TCTTCCCCAA AACAGAATTA
 TAAAAGCTTA CTMTAAACAG GAGGCAGAAT AATTCTTTTA GGAAACCATT TCATTCTGTT TCTACTAACC TATACCATCT
 GAGGAATTCT AGGGAGGATA ATAAAANTCT CGTGATTC ACAGCAAAC TACATACCTT AAAG

SEQ ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTTC ATCAGCTCTT GTTCTCTCTC ATTCTTTTIG ACCTTGTAGA TTTATCCTTT TTTCTTAATT TATTCTCACT
 TAATGGGATT TCAGGAGCAT ATTGACTAAG TTTTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC
 TTAGATATTA CTGATGTAAG TCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTG TNCCTAATTG TTTTAATGAT
 TTCINCCGTG GAGTTGGGGT GGTGCTGCCC ATCACCACCT CAGGACGGGT ATTTGAAAAT ACCTGGGNNNA AATTGTAAAC
 ATGTCTGGGA AAACACTGCA GATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG
 GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGTTCTACTC ACGGCTCAAG AGCATGGCTC AGGAGGAGAT CCGCAGAGAG ATGGACAAGA TNATCGAGGA CCTGGAGCTC
 TCCAACAAAC GGCATCACT GGTGCAGACA TTGTGGGGTG GCATGAAGCG CAAGTGTACC GTGGCCATCG CCTTCGTGGG
 CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGCG

SEQ ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGT TTGCTCTTG TCACCCAGGC TGGAGTGCAA TGGTGCGGGC TGGCTCACT GCAACCTCTG CCTCCCCGG
 GTTCAAGGGA TTCTCTGCC TCAGCTCTCT GAGGAGCTGG GATTACAGGC ACCCGCCACA CACCCAGCTA ATTTTCTATT
 TCCAGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGGT TTTGAACTCC TGACCTCAGT TGATCTGCCT GCTCGGCCCT
 CCCAAAGTGC TGGGATTACA GCGGTGAGCC ATTGGCACAC AGCCTTATCT GCATTTTCAA ACGGGCCAGT ATGGATGGGT
 TTTACACTTA TACTNGAAAG GTCATCCTTT TNAAAAAANG AACCTTTTAA ACCATTAACT ATATATAAAA ACTATATT

SEQ ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTTNA GCAAAATGAT ACAAACNT NTAAACCAAG TAGAAGATTG GTAGTTACAG TGAATCGTC AGGGAGTACA
 GGGCGGCCAC CACTGGAGGG AGCTGAGGCC CTGGAAAAGG AGTCTGATTC TTTGCAATTC TCTCTCTGCT TTTNTTCCCA
 GCCCCGTAC AACCGAGTTC ACGTGGGGGG CCGCAGTGCA GCCCCAGCG TGGCAGCTCT TGGAGTCTGT CCGTTTAGTA
 TGTTTCCCCC ACGAGCGTCG CTGGGTGAGT GGCTGGAGA GCTCCCGGTG TTAACATTC GATCCTAGAC CGGGGGGACG
 TGTCAGTAGG TAAAGSCAT TGGGTAAACCA GAGTAGATCA GGCCATGGCA TTTGCTGGC CCCTTTTACA GCAATTAAGG
 GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

CTTCAATGAT GCAATTGAT TAGCTGTGTC TTACAAACAG AACTCCCAGG ACTTCATGGA TGAGATTTTT CAGGAGCTCG
 AGAACTTCAG CTGAGAGCAG GAAGAGGAGG ACGTGCCAGA CCAGGAACAG AGCAGCAGCA TCGAGACCCC ATCAGAGGAG
 GCGGCTCTC CCCACAGCTG AGGGGCTGGG GCTAGGGGTG GGTGGAGCCC TTTTAAATA CCCTTCCCTT CAACAACCTCT
 CCAGCTCTGA ATGGAGAAAC TCTCTAGNC ATCCCTCTT CTACCTCTG CAACCCACCC ATCCTATTAG GCTNCCACAT
 TCTAGGGCCC GTGATACAGG GGATGAGGT CAGCAACCAG CAAAACCTCTN GGACTTGTTG GGAAGAATTT TCCCC

SEQ ID NO:643: (Length of Sequence = 325 Nucleotides)

214

GGTATCTTAA AGCCTTTCAG GGATTTCAT AGACACATTT CTTTAGCTGA AATCTATCT CTCAGAACT TACCCAACT
 TCTTAATAAT GTNCAAAATC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATTTCTC TTCACAATTC
 CCTGCGATAG CATCATGGCT TCCTAAGGGC TTTTAAGTTT ATTGCTTCAA CTGATTCTCA TAAAATCTCT GAGATGCTAT
 CTGGAAAGTA TTATTATCCC CAGTTTGCAG ATAAGGCAAC TGAGGTCTAG ACTTGCTAAA AAATCACACA ACCAGGTAAG
 TGGGC

SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTTCACATCA GCAGCCGAC GAGGTGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTGATTGT
 CCAGAGAATC CTAAATGAA GTTGATGGA AAACGTGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT
 AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTCACAGTT CAATCATCAG GCGCGAGGGC TGGTGGTGAA GAATTAGATG
 AAGGTGTTGC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTTAAAGCAA TCCTINGAAGG ANCCAGAGGA GCGAAGGATG
 CAGATCACTG CACCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

SEQ ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTTT AAGACTCAAG GTAATGAAA CTATGAGTAG AATAGTAAGG TGTGACAGGG GACAAATAAG TAGATATAAA
 ACTATGCTGC AATATTTTAG TTATTAAAGC TGGGAAATAT GCAAATGTAA GTAGTGCTTG GAACCAGAGA AGGTTCTATA
 TTTAGCTGTT CTTCGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCTGCTCTA GGTACATTTT ATGTATATTT
 TGACAGCATA TCAAATATAT GANACATTAG GTTAAATAAA TTAAATCCA GTGGGATAAA CTATATGGGG

SEQ ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG
 GAGTGTATGT CATAACAAAT TTNCTCTGT GCTTAGAAT TTTATGGCTT TGGATTTTAC ATTGATGTTT GCAGTCCATT
 TTGAGTTACT TTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC
 ATTTATGTAC ACGGGTAATC TGTITTGATT TTGTGTGTAT GTTAAACAT CTTTATTATA GTATTNTGTA AGAGTAGGTT
 AATATTGACC TTGGGCATTT TTAAACCAAG GGGGGAATTT CC

SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTTGGGCTC AGATCTGTAA GTTATTTCG TCAATGTACG ACAGCTACAT AATGNCCTAC ATTCTAGATA TTCCATCACT
 GAGGAACTG CTAAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAATAATC ACTGATTAGA
 CCTTAAAAAT AGTTCACTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGAACAT ATTTGT

SEQ ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TTAACCTTT TACAAAACAA CAAGTTTTC TTAATTATG ATTTGTTATT ATAAAANCTA GTAAGAAAAA
 ATTCCACCAC ATGAAAGCAT TTNCTAAAT TCATACCCCC GTACCTATTT TTAANTACAG TTGGTAAATT GATTAAAGCTC
 TATTINCATT TTGANTGATC ATCGGTTTTA TTTTATTT

SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCTGCAG CCATATATGA GGTCCCTCAT GAGACTTAGC AACAAGGTGT GTTTAATGT GACAGTGTGT CTGATGTGTC
 CCCAGCACAT TGGGACCACT ACACAGTGT ATTTGTACAT CTGCTGAGTA ACATTGAGTG TGTGGGTAAC TAAAGCCCTC
 AGTAATTATT TACTTAAATG TTTTCAAGCT TAATCTGAT CTGTACTTTC CATGATTTAT TATTCCTTGT GCTAAATCT
 TCAATGTTCT TGCCTTGATT GATCTGTCAT TATCTATCAC TTAATAAAA TANTAATNC CTTTAATTAA GTCATGGTTA
 AATGAGGGAC TTTGTTT

SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTGAAAG GAAAGGTGAC AGGAAAGATG TGTITAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCTGT CTCGTAAACG
CATCTGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCTTTGAAT CTAAAAGACT TTTTCTACT AAAATTTCTA
CCCTCAAATT CTCAACTAAT GAAGANTGTT TACTTTTGT TTAACCTCAC TTCATTTTCC CAATTAACATA TTATCAAAAA
AGTTAGTGCA TTGTAAATA AGNTAATAAA GGNTAACACA TTATCC

SEQ ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGTAA ATTTTGTCTT CTGGGCTGT CATCAGGATT GCAATTTTNA GATTAGTTT GCTAATTGTT TGGCCTTTGA
AAAAATATAT AACTTTGGTT TGTTTTGGTT TTCTTAAGTC AAAACAAGGA AATAAAATCA CATTTGCTTT CCAAGAAAAG
ATAATGTTTA AGTGGTTGTT TAGTGTTTTG TGTCTTTGGG GGTGGGAGGG GGTGTGTGGA ATACACAAAC ACACACACAC
AAACACACAC AGTCTATATA TAANCITATT GGAGCCATCA CTATATTTTA AGGAAAATGN AAATAATCTA TTGAAGCTTT
AAAATTAGGA ATTTTGTATT TAAGCTAAGG AGCCTATTTT

SEQ ID NO:652: (Length of Sequence = 353 Nucleotides)

GTGGTGGGNN CCTGTAATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT
GAGCCGAGAT CGAACCCTG CACTCCAGCC TAGGTGACAA GAGCGAACT TTGCCGGCAT TTACACTCTC AAAAGATTTA
ACGCAATTAC AATCAAAAAA CACTTGTCAT ATATAACACT TTTTCACATG GAAATAAATT GGTGGTTTAA GGTTTACAAT
TCCTTTGAAT AAAATTTTCA TTATTAGTTA CAAAATGCTA AGACAGATTG AGGTCTCAA GAAAGANCTT TGAGGAAAAT
TTATGGTTTT AAAGGGACTT TCACCAAATA TGA

SEQ ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGGA NTACTTTATT CAAAACCCAT CACAGAAATG GACAGCTTGG GTCTGTAAAC AAGCATTAT GTTTTAGNGC
ATAGGTCAGT AATTGTATAT GAGAGCATAC ACTGCTACAT ACAAATTAAC TGNTCAGACC ACAACTTTTC AATGTTTAA
ACAGNATAAG CTTCCTGTG AAAGCAGCAC CTTTGTGAC GNITTAACIT TAGTATTCCT CTCC

SEQ ID NO:654: (Length of Sequence = 353 Nucleotides)

GTCAACTCTA TTTTCCATAT GAATTATTAG ATTGGTGCT GTCTGTGAA GTAACITGAT ACGATAGATG TGTAGTATGA
ATTTTGTCCA CATGGTGTG CCTTGGCAG AACTGCACGT ACCTGAAATG GTTCCCTAAT TTTTCTTAG TATTACTATC
CAACACTTCC TCTCATAATC ACTAGTGTAT TGTATAATG TTAAGTGTCC TTTATTCATA TATTAAAT AAAGAATAC
TCTGGTAGGA TTTTGAGGGC CAATAGTGTA TTTCCACTGT TTGAGGTATT AGGAGGGCTA TTTACTGATA CCTGTAGTGC
CTTCCCATTC TGGTTTATCA TGCACCTCTA AAT

SEQ ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACTINACT TCACATTTCT CCAGGGAGGG ATGCTTTGGA AAAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTTINAT
CCCTTTTGTA CCTTTTAAA GACATAAGGT ATGTTTGTAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA
GAGCTGCTGT TGTCCACAGC TTATTIATTT NCCACCCATT TTTGTCTCCT GGTCCTATCC AGTTACATTT CCTGGGATAT
GTTTTTGGAG GTTGTCTAGA TCACGGCACT AGAGTCCCTT TGGGTTTCTC CTCCCTCCTC TGCTIATTTG GCCTGGCCCT
TGACAAACAT TCCCCACATT CACAACCAGG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTCAATGAGTC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG
GCGTGCACCT GCATTTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAATCGC TTAAACCTGG GAGGCAGAGG TTGCAGTGAG

216

CCGAGATCGC TCCACTGCAC TCCAGTCTGG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAGG
 GATGTTGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT
 AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

SEQ ID NO:657: (Length of Sequence = 334 Nucleotides)

GGTGTGGAA AAAAAAACCCT CCAGATAAGA TTGTGCCTGC TTCATTTTCT TGTGAGGCTG CCCAGACAAA GGTACTTTTC
 CTGATGGGG ATTCTATGTC ACCTGATICA GATACTGAGC TTCGAAGTCA GGCAGTGGTG GATCAGATTA CCAGACATCA
 CACCAACCA TTGAAGGAAG AAAGAGGGGC TATTGATCAG CATCAAGAAA CTAAACAAAC AACCAAGGAC CAATCTGGAG
 AGTCTGATAC ACAGATCATG GTTCTGAAG AGCCCTGTGA ACTTCCCTGT TGAATCATT CAGACCCAGA AAGCATGAGC
 TTATTCGACG GATA

SEQ ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TGCATTTCCT TCTGGATATT GTTGAACAAA AATAGCATTC AGTTTACCCN CTAGTGCTAA CAGAAGNGNC
 TCAAGCTGTT CCCCCATCAT GGGNGCAGCC CTTAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA
 AAGCACTTTT TTCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCGNCTN TGCCTGGGCA CAGATGAAT
 GCCCTTCAAG GCAATCATCA TCTTTTCT AATAGGAAG GTTTGG

SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGTCTTTATA TGTTCOCGAG ACAGGACTGA AACTCCCTGC TTCAAGTCA TTTTCCCTAAG TAGCTGGGAC TATAGGCTGT
 TTCTTTTTTT AAAGGAAGGA TTTTATGTTT ATCATGAAGG AAAATAA ATTTGGCTAA CTTAAGAGT TATTATCAG
 GAGACACTAT TAAAAAAGG CAAATCAGAA ATTTGGAGAA ATTTTAA ATACTGATAA TAAGACAGAA TTGTACCCCTG
 TAACCATAAA TATGTAGAAT TTCTACCATA TCAATAAGGT AGTTTCT GTTGCTCCAC ATCTCTTGC ACGTTTGGGT
 A

SEQ ID NO:660: (Length of Sequence = 302 Nucleotides)

TTTGTAAAG ACATAATGTT TTTGACTGGG GATCATGTTT GGCTGATGTA AATATTAATG CCAAAATAGG AGCTAGGATG
 AAAGTAACAC TGTAATTAGT AGTAGAATTT ATTTTCATTT AAAATGTGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC
 AACAAATTTT AGAGTGCACC CTCATTGATG CTACTCACAG AGACGTGGAT GTGCTGTTAC TGCTTTCTAA CTCTGCCTAC
 TAGTGGCCT ATTATGATGA TGAAGTTGAT AAAGTAAACC AGTATCAACG NCTAAGTCTA GG

SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GGTGCAAGGG TAGTGGCACA TTTTATTTAT
 TTGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TTATCCGTGC ATTTCTTCTG CATTGNTAGT
 GAATCCTTAC TGGGNCAC TCAITCCATT TGGCAACAAT CTTTAATGNN CAGGCAATAT ATAACATTGC TGAAGTCTCT
 TAGCACTAA

SEQ ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTTT CCAGCACATC CCTATGTGTG CGCCTATTTT AATGCACCTC
 TCTGAAACAG AGACCTTTTT GTTCACAACC ATAATAAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA
 TCCCATTAGA ATTTTTTCAG GAAAGACTTA TGGNAAAAAA TATCTCTCTC CCACCTCCTT TTATCCCCAT GAGACACAGT
 TTCCCCTGT AATCAGGGTA ATATGCATTT NTAAAGNCTG ATATGTGATA CATTATGTG ATGGCAAAGA TAAGTCTGTC
 TTGCATGCAG GGTACTAGAG

217

SEQ ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CTATGAAATT AGCTGGGGAG ATACTGTCTT TATTTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGTTT
 GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACACGGCG TTGGGTGAC TGGCTTCTGG TTTTGGTTCT
 CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTCCCTTCT CTTTCTCAG TAGCATCTGA CTCTTTTCAT AAGCAAACAG
 CTGTATAAAC AAAGCCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TTGTTCACAC AACCTTATTC TNCATCAAC
 AGCCG

SEQ ID NO:664: (Length of Sequence = 300 Nucleotides)

TGTCTGAGAG AGATGATGTT TCATGGGTGA TGTCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC
 TTTAGGCAAG TCAGATTGT CTATACTAG TTAGGAGTAA AGAGAAATGG ATGATACAGA TGCAGCTATG TTCTAGGAG
 GGAAGTGGAG GGAATTTCTG TGTGATGGCT TTAGTAATGT AGGCAGCAAG GTCAACTACT GACAGTGAGA GGAGAAATTC
 GGGGAGGCTG GTCACAGTTT GAAGTAATAG GTCATGGGGA GGCAGATGTT TGTGGGTGGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAAATAAGAA CCCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACCGA TTGAGGTCAG
 CAAGAAACAA ATTATTCAAT ATATCCCTG AGGGCTAGAG CCAGACTTTC CCTATGATT CCAAATTAC TTGCGAGTTT
 CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCCTTAAAA TTTAGATAGA CTTGACAACC
 ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTTGTG GGTAGAGGA ATGAGGAGCA
 AGAAGTA

SEQ ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTGAGCTGT TCCTCAGCCC CCTACCTAA CTCCCTCCCT ACTGTTGATC
 AGGCTGGTCT CTAACCTCG ACCTCAGGTG ATATGTGTGC CTCAGCTCC CAAAGTGCTG GGATTACAGG TGTGAGCCAC
 CATGCCGCGC CTGGGTTTAA TCTAAGGTC TTGTGTGTC GTTCCATCT GCATGAATAC ATTCTCTCA TTTACTTACG
 TCTTAGCTTA AATGATACCT CCTCTCTTT CCTACTGCCA TTATCTTCCC TTGTCACTCC ATACTCAGAT TTCATTGCA

SEQ ID NO:667: (Length of Sequence = 288 Nucleotides)

GGTGGCAGGC TGCTTGCANT NCAAGCCAG GNGTTTCTG ATGGGTCAGG GTGGGGAGGC TGCACACCAC ACAAGGTCAC
 CCTACTCTAC CTCTACCCA CCTACCACA GCGGTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCCAAG
 TCCATGAAAC CTTACAATTA TTGCAGTGG TATGANTCCT TCTATGAAAG TACTTCCCCT GAGGTGCGCA GCGCTCAGTT
 TGAAGGTCCC TTAAGTCCCT CCCCAATTAA CTATAATGGG GATATTTT

SEQ ID NO:668: (Length of Sequence = 212 Nucleotides)

TCNTTTCINT TTCTATCTA TCINCTTCAC CATGTGTCTT CGGGGCTGG AACATAGTAG ATGCTCAATA AATATTGATT
 GAATGAATGA ATGAATAAAT CTNCTTACAC CTCTCATGCT TCAACAGGG AAAGGCTAGA TTATTTAGAA GTCTTGTGGG
 GGATAATAAT NAGCTCAGTG GAAGCCCTCT AGTTCTCACT CGAGTTTCTC CC

SEQ ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCTTTTCAA CCTATCAAT AAGATGTTAT GAAAGATTGG TTCTCTTGT TACAAGTAGT ATAGAATCTT TTTTGATCTT
 TGACTCTGTG CTGCCATCT CATCAATGTT GTTGCTATTA ATATCTGTCC TTAAACTG GATGTTGGGA TCTTAGTAAT
 GTTGCTGATA ATAGGATTTT CAGCAAACT TCCATATCCC TTGAAGATAT GGTAGTTTAT ATTACTATAT CGATAACAGT
 TTTGCCTGTG GAGATTGAC TAGTTTTAGG TGTTTGGAAG C

SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAAGTTG GGATATTGA TTGTTTTCIT TTCTGATCIT TATGCTGACT GCAGTATCAG ATACCATTTC ATTGTTTAAA
AATCTTCCTT TTTTTTTTTT TTTTTTTTGG CATTTTGCTC TTTTGTGATT GTTTCAAAGT CAAGTTGATG GCNCNAAAAT
TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CTACTGGCAG CTAGTTTAT TCTTAAAAA TACATTAAAT TAGG

SEQ ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGT AAATTGTTTT TAATATATTT AAGAGCACAC AGAAGTCTTG ATTTATAAAA AAATAAATAT ATAACATGAC
AAATTTACTG ATGATCCTGG GGCTCTGAGG TCAAACTCCT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGTTA
ACACACACAG GGGCATATTC CAGTTGTAAA AAACAANTTC CTGAAGGCT CAGNACGTAC AAAANTCAGT NTTINTGGCA
GAAAGCACAT CC

SEQ ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAACCT ACTTACTCAA TCCTCTTGAA ATCTGCCTTT TGTAAATGTA CTGATAGGCC AGCGTTTTCT TTCACTGTGG
GAAATAAAGG CTACTTGGTT GCTTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTACT
AGTCCACCTT TAATAAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCATT
GTTTAGACAC TCTCCCTTCT AGTGCTTGGA GAACCTTCAT GGAAACTCTG TTCAGGTTCT TGACTCTCAG CGACANATGT
GGAGGTCTTT GTGGTCTTAG CTCTTAGGC CTGAGAATCA CATACA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCCTCCCA AAGTGTTAGG ATTACAGGCG TGAGCANCCA CACCCTGCCT GGTGTGTGAC TCTTTTAAAT
ACTAAGTTTT TAATGTAAAA TGCTGCTTTT AGATACACTG TAAAAATACA CCTATCAATG AGTTTTTTTA TTAAAAACAT
TGCAATTGTA CTAGNCTTTA AATACIAAGC AATAATTGAG GCTTCAATGT TGGTTTATAG TTTTCTCATT TCTTTCATTT
AATACCTCTG TAAATGAAG CAGTTACTTC CATTTTCTG AGGTGAGATA AGTGCCCTGC ACAAATGTTA TAGGNCCAGT
AAGTGAGGAC TGGAGCTCTG GATCCTAAT

SEQ ID NO:674: (Length of Sequence = 256 Nucleotides)

GCACTTTGGG AGGCCGAGGC AGTTGENTCA CCTGAGGTTA GGAGTTTGAG ACCAGCCTGG CCAACAGGGT GAAACCGTIN
TTGCTCTAAA AATACAAAAN TTAGCCGGGC GTGGTGTGTC ATGCTGTAG TCCCAGGTAC TCAGGNGGCT GAGGCAGGAG
AATCACTTGA ACCCGAGGTG GGGCAGNGG AGGTTCAGT AAGCCAAGAT CGCGCCATTG CACTCTAGCC TAGGTGACAG
AGTGAGACTC CATCTC

SEQ ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATTT TAGACTCTCA ATTTTAAATT AATTTTGAAT CACTAATATT TTCACAGTTT ATTAATATAT TTANTTCTTA
TTTAAATTIN AGATTATTTT TATTACCATG TACTGAATTT TTACATCCTG NTACCTTTC CTCTCCATG TCAGTATCAT
GTTCTCTAAT TATCTTGCCA AATTTTGAAA CTACACACAA AAAGCATACT TGCATTATTT ATAATANANT NGCATTCACT
GGCTTTTTAA AAAANTGTTT GATTCAAAAC TTTAACATAC TGATAAGTAA GA

SEQ ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATTT ATTTTGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCCT TTINCTATCCA
AATCTGAACC CAAAGTGACG CCTGGTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG
TTCAAGGGAT GGACAGGAAT AAAGGAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA

219

AAATATAATA TCAAAAATCA CTGCTGAGCT CTNCTGGCCT TCCATACTTA GCTCACCOCG GCACCTTGAAA TTCCACTTA
CTAATACAAA CTGCTCCTCA GGAAGGANGA GATTACTTIA GNAAATCCIT GCAGGATGTT CCTGTCTATG GT

SEQ ID NO:677: (Length of Sequence = 333 Nucleotides)

CGCATGCTAA TTAAAGATA TACAGGAAGN GAAAAGTAGG AGTTAAGTTG GATGTTGTTA GAAGTTGGAT GTTAGTATTA
CCTTCAGGAA CAGATCCCCA TGGCATGTCA CAGGCCTTAA TTATATACCT GGCTTTCTTA TTGTCTCCAC TTTATCATGA
GGACAAGGTC TTGGTTTCAT GGGAGGAACT TCTCCATTGA AATAAATGTC TGCCATGTCA GCACCGTTTG TNCCTCAGT
TTTAATATAA TGGACCATAT ATTAAACATN ATTAAACATA TTTTAAATN TGGTGTCACT AGGTAGATGC CCCAGNCATC
CTACTTCCCT CAC

SEQ ID NO:678: (Length of Sequence = 359 Nucleotides)

AAGGAGACAA AGAGTAGATA TGGTATCTTG GGGACAAATG GCACATGAAA GCAGATTTGG TGCTTCTTTG GTAAATGGTT
TGATAACCAA TCCCTAGGAG ATAAAGTTAA TGTGTCTTTT TTTTTTTTTT TTAANCGAAG GTCCCTTACT GGTCTTGCTT
CCATGAGTAG CCGTGACCAG GGGAAAAGGG AGAGTTTTTT TTTTTTTTTT TTTGAGAAAG AGNCTCACTC TGTGCCCCAG
GNTGGAGINT AGTGGCATGA TCTCGGCTCA NINCAGCCTC TGCTTCCAG GTTCAAGCGA TTCTCNTGCC TTAGCCINCC
GAGTNGCTGG AATTTCAGGC GCATGCACCA TGCCTGGCT

SEQ ID NO:679: (Length of Sequence = 339 Nucleotides)

GGTGGCACAT GACTATAGTC CCAGCTACTT GGGAGGATGA GGTGAGAGGN TCACTTGAGC TGGGAAGTA GAGGTTGCAG
TGAGCTGAGA TCTCACTACT GACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAA AATAAATAAA GANAGAAAGA
NTATAAATAT TTTGTATCAA TTTTCAGCTT TTACAGTCAA TGAACCTAAG TCTTAATTTT GGTACAGAA TTAAATATTA
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GNAAGAGA GTGAATGAAA
AGAAGGATAC TAATATTCT

SEQ ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA
GAGGAAAAGC AAGTTGGCGT TGGAGTCAGC TGTCAAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGGT
GGTCACCTAG TGTGTGCCG TGAAATTGG AGGGTTAAT TTTAATCCA AATACCATAG AAATGGATAT GAAAAGATGG
GTGACACATG CTGCACGTG GGAAGTGGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT
TTTGTNGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEQ ID NO:681: (Length of Sequence = 345 Nucleotides)

GGCCTGGTGT TTGGCTGAGG TGCACTAGGA CCCCTGGCCG TGGTGTACTG GATGGCATCA GTTCTGATGG GTCANATGTC
CATTCTAACA GGTGGTGCT GGAGAGGGAG CAGTTGTAA ATATCTTTAC TATCTCCCT NCTCCGGACA CCTAGATGCC
CAAATATACA GCACGTAGTA TCGAGGCAGG CCCTTTGTAT TGACATCAGA ATCAGGTTTG CAATGGAATA GGAGCTTTCC
TTCCTCCTGT CACTTTAGCC CCAGGCTCCA CTCANAGTC TGAATGCTC ATACCTATGG CAGGTGACCT TGTGTAAACAG
NTTGGGGTTA ATGCCATTCT GTCCT

SEQ ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTTC TCTAGCATG ATGCCACCC CAAGGTACTT ACACGTCTTC AACACACCT TCCGGACAGC
TTCTGGTAT CTGTGTGGC TATTCTGGTG CACGGAATA TTCCATCTT TTGAGATAAT GGGGGGAAGC CTAGTAGGCT

220

CTGGTTCCCTT CTGGTCTGAA ATTAGAGTAG ACTCGTTCTG AGTACTTGGC AAATGACTAT TTGATTCTCT GATTCCCTGG
NCTCCATGCT CACCAGATGC ATAGCAGGGA TCTCTCTAG NCACTCACAT CCAATTTTCA GG

SEQ ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTTTAAAT AGTTAAAACA TTTTTTTAAA TCCATAAGTA ATTCTTACTC TACTCATTTA TACACACATA TACTCACATG
TACACAGACA TACCTACACA CACACTTATA AATACATGTA TACACAGAAT ATAGTAAGGT CTITTATCCC TTTTCAATGA
AATAAATATT GTATTCTATA TTTAGNATAA ATAATGTGA AAAAGTGATT TTGGAGAAAG GTTGAAATGA TTGAGTCTTA
AGTGTGTCAA TGTATAATCT ACCCCTTTCT AAACATCGTG TTTTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT
GTGTTTAGG

SEQ ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTTGAGATT ACACTGCCAT GATACATTGN CTGACAGCAC TTCACATTTT CCTGAGTTG GGGACAGAAA
TCACACTGCC CAAATACATT ATCTGATGGC TCTCATGTT TCCCAAAAGT TAGGAAAGGA GGTTCATAT ACATACATGC
ACAAGTGCAT ACACACACAC ACACATACAC ACACACACAG TGCTAGATGA GATGTGANT GNCATAAGGA AATGAAAGTN
CCATCTCTCT NTNCCCTACC CCTGCATCT GTCCCTTAT A

SEQ ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTTTAAATA ATTTTAACT AGCTACAAA TGTCAATCAC TTCACAACT GACAGAGGAG ACAGGAGGAA TTTAATATTA
CATGCTATAA TGATATTTAT CTCACAGTTT ATATTTCATT CATTATATAT ATTTTITTA AAGGTTTCTT TATCAGCTAC
TAAACATCTC AGCAATTTGG TGTCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT
GGTGGTTAGT AAGAGTCAGC CTTATAAAAT TTACATCCAC ACTGTTTCA CAGCAAGNTT GCTCTCTCCA AAACGGTGEN
CATC

SEQ ID NO:686: (Length of Sequence = 380 Nucleotides)

CGAGGAGGAG GAGGAGAAAA TTCCCCAGA TTGGGCGAGG CCCGCACCCC ACATTCGGTC CTGTTTTGAG AGGAGGAGGG
AAGAGAAATA AACGTGGCAG CGCATAGAAG GCCAGCAGGG AGACTGCTTT CCAGACACCT CCGGCCACA CAGCGTTCA
CCCCCGTTT TTTGAGTCTT GGAAAGGAA TTGGGCTCTG TTTTCTTTT GGGCTCTGTG CAACTNCAGC TACAGTGGA
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TTTAAGCCTA AACTTNAAGA GCCTACCCG
GACGAGCAGG CATNCCTTAA CCTTAAAGCA ATCCAGTTTC ACGGCTGGT TCAGTGGAAT

SEQ ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACTTCCC CTCTTTTATG GAAGCATAGT AAGATTTTTC CTCTATGGCG ATCATGATGG AGAAGTATAT GCTACAGGAG
GNGAGGTTCA AATTGCAATG GAACCTCAGG CACTATATGA TGAAGTAAGA NCTNTGCCAA TTGCAAAGCT GGATAGGACA
GTTGCTGAGA AAGCTGTTAA AAAATATGTA GAAGATGAAA TGGCAAGGCT CCTGATAGA TTGTCAGTAA CTTGGCCTGA
AGGAGATGAA TTATTGCCTA ATGAGATTAG GCCTGCTGGA ACCCTTATTG GTGCGTTAAG AATTG

SEQ ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAGT CTGTGACAAC GACAAGGTGA ATACAAGCCA GTCTCTACTT CTCTGGGCCT
CTGTTTTCTG CACTTTATAT AAAGATTGGG CAAGATGGTC TAACITAAAT TTTATGATTC ACTAAGTTGA TTTTGTATGG
GGCAGATTTT NCTTGATGA AATATTACA AATAAGNCAC TCAAATAAAT CAGCAATGGG GTGCAGATGA GGAATACCGT
TTCTACAGCA AAATATGGGT GAACCTAGTA AGTGTAGGNA CACAGAAGTT AATGCTGACC TCTTGATAG CATGTATGGG
ATATTAAATC ATTTCTGCTC TTCCATTTCA GGGGTGAGGG AGGAACAGCT GTTCTGAAC TCTTTTAAAG

221

SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGTG TTAGCATTTT TAAACTTGAG ACTCTAACAG TAAAAATAAA GTAATCTGAA ACCTGTTTCC ATGGGTAAAA
 CACTCTGCCT GGTATTCTTG TACACAAAT TTAATAATA TGTAATATC ATAAATGAA AATATCACTC CCTTCAATTT
 CTTTGGCCTT CACAAATTCA ATGTGACTAT GATCCTTTTC AATAATACIT TCAATGACAT TGTGCTTCTT TAGAAAAATC
 ACTTAAGTGT TAGCATACAA TAGTTAACAT TAGTCCTTTT ATTGCTATGG TATATGCTAA TTTTITTAAG AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAATACT CCATATATTT NAGAAGCAAT TGAAATGCA TCCATGTATG TNATTGAGC GTTACTAGAA ATTTATTTAT
 ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GTCAACGATG
 AACTGCACAT ACAATGGTGG CCCATAAGA TTAAATAGA NCCAAAATTT CCTATGGCCT AGTGATGCTG TAGCCATCAT
 AATGTGGTAG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT
 GGACTGGCTA AGGACGATCA GCTGAAGGT CATGGGTTT AAGTGCTTGT GGCTCACTGA AGCTAAGTG AGGATTTCTT
 TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTCACAGGT TTAAAACT CACAGCTTGT ATAATGTAA CATTGCGGGT
 CCGCTTTTAA CTGGACTAG TGTAATCCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA
 TTTAAACAGA GGTCAAGCAA TAGGCGCTG GCAGTGTCAA GCCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC
 AGAGNCCTAA GGTTTACAA CAAACTATGG NCCGGAACCT CCTCAAGTTC T

SEQ ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTTNTGA TTATTGATAT TAGAATGTT TAAATTAAG ATATTAACAT TTCAATGAGC TGAGTGGTGA GCACACCACT
 TTTATATTCT CTCATATAA CTTTGTTAT ATTGAAATG TTTTCTATA AAAAGTATTT AAGCAAGTTT AGGAAAGAAT
 ATTGATAAAT GAAATCTAGA GACCATCAA AGCCATTTT ACCATCACA AGTATAATTG TGTTTCAAAT ATAATTGAAA
 TTGTGTGACT GTTGCAATTT CTCTTTTGT TTGTGTGTA TGAAAGCATC TTAAACAGTT GCCTTTCAA GCTGTTATCT
 TTGATANTAA CATAATTAA CCTAACATG TGGACTTCTG TTA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAAGGGTCC CAAGACTGCT CTAACAACAA CACCATTTT CATAAATATG GNTCAATAAA CACTTATTC TTTTATAA
 TTAGACTCTA TTGTTAGAAT TGTTTTAGGT TTATAGAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC
 CCACAGAAAT TCACAATTA CCTGCGATT AAAGTCTAAT GTTAATATGA TATATTAGT ACAAGTAGTG GGATTATATT
 GATACATTAT TATTAAATTA AATCCNCA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GGCATAGTCA CTTCCAGACA TGGTTGCCCT TCCATGTGGA GTAGGTCAA GTCTCCGTCC TCCCTGGCCA GGTGGAAGCT
 CCAGAGGGAC ATGTTTCAGC TTAGTACAAG GTGGCTGACA CTACTCTCT GTAGGAAGAG GCTGGCTGGA GGTGAGGGCG
 CCCCCTCAG CCTGTACCCA TCAAGAAGTA TTCAGAAAGG ATGTCTCTGG CATCCACAAG ACTACTGGGC GAACCACT
 GCAAAATGA AAAGTAGCT ACACAATTA AATTGGTCTT AAACAAGCAA ATAATCCAGC CATTGGTGAC TCTGGGAATC
 TAGAGTGCAA

SEQ ID NO:695: (Length of Sequence = 344 Nucleotides)

222

CACTGTGACG GATGAGTGGG TATTTCTTTG TACCCGTGAGC TCTTTCATCC TACCTTGGTG GTCAAATGTG AGAGCAAGTG
 CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCATG GAGTCTGTTG TGGTGAATGT NCTTGCTGSC ATCTTGATCA
 AGGACTTTGT CATCATTAGC CATCAAATGC TTGTTGGTCC TTCTCAACCC TGTAAATGTTG ATACTTAAAA AACTGGAAAC
 ATCTGACAG AACAGTCCA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGSTTCTG
 TATTCAGTGC CCCATCAAAA ACAG

SEQ ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTC ACATCGATGT
 TCATCAGGGA TATTGGCCTG AAATTTTGTG GTTGTGTTG TATCTCTGCT AGGTTTTGGT ATCAGGATGA TGCTGGCCTC
 ATATAATGAC TTAGGGAGGA GTCCCTCTTT TNCATTTGTT TGGAAATAGT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT
 ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCCTG ACCTCAGAGG
 AAAT

SEQ ID NO:697: (Length of Sequence = 341 Nucleotides)

AATTAATCAA TCAGCCATTT TGGTGGCCGA AATTTATAAG GCAAGTAATA CTTTTAGTTT CTTTGATAGA CACCATGATC
 AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAATT TCTCTGAGTC
 TTCATAAGAA ACACAAGCAA GATTTTCACAG AGGCAGTGGG ATTTGAAGTG AGTCTTGAGA AATAAGCAAT ATCTGAACAT
 GTAGAATGCA AAATAAGGA TAAGCAAGTG CTAATGCCCA GAGGGTAAT ACATATTAAA TANCANTAA CCAATTGCTA
 CTTGTGTTTC TTACACTAGA A

SEQ ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAAG AGAAGCAGAA GAGCAGGGTA AACCCCTGGT ATAATTGTG TAGACCCCA TGTCTCCTTT AGTCTGAGTT
 CTGACATAAT TAACGTGCTA TGAGATGTAC TGGGCTTTTC CTCATTGCTT TTTGATGCCA CCTCACTAAT GTAAACAAAA
 CATTCATTTT TTCATCCTAT TTTTCTTAC AGCTGCTTAG CACAGTCCTT ATGAAAAAAT GAAGCCTTGA AAATGGTATA
 TCCTCTCGAC AAAGCTAAGC CTGACAAGTT GGTGCTATTA CCTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGGG

SEQ ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGGTGCTC TAGACTGTGA TGCTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCTAG GGCCGGCATA
 TGGGCCACTG GGTGGAAGAG GGGCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA
 TTCGGTCACG CTTAAAATGT TGAATTGTTG GCAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT
 TTTGAATTGT AATTAGATTA ACATTGTAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC
 TTTTATCACT TCTAGGNGT TACTCCTAAC AGTAACCTAC AAACCCAGCC CCAAATCAGA GGCTT

SEQ ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTTGGA TTTGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TTTCTTTAGG
 ATGAAAGAGT TGTTTTTTGA GGACAGCATT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCCTAGGCA CAGGAGTGGC
 CCANAAGCAG AATGAGGATG TGGACTCINC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGAT
 GCGGCCAGGC TCTTCAGNT GGGCCTGATC CCNCACTGGT GCTTACTNTG CTGACTGTGT ACTTATCTTC CCCAA

SEQ ID NO:701: (Length of Sequence = 387 Nucleotides)

GGCAGGAGAA TCGCTTGGGC CCGGGAGGCA GAGGTTGCAG TGAGCCAAGA TCGTGCCACT GCACTCCATC CTGGGCAACA
 GAGCGAGAGT CTGTCTCAA AATAAAAAAT AAAAAAATAA GGTAGGTCTT TTCATCATTG TGTTTTCTAG CATGTAGCAC

223

TGTAACCTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGAAGG
 AAAGCTAAAA TATTINCCAC GTGAAAACCA TGCATCCTGT TCAGAAACTA ATTCTGCCTT CACGCCTTCC AGGAGCATGG
 GAGGGGTGTC GTCCTGNNCC TTTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAAA AAAAGGAGCT AACTAGATGC TGTCAATAAG AGACTCACTT TAGATCTAGA GACACAGGTT CAATGTAAAG
 GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTGTGCCCA CCAAACTCA
 TGTTTAAATT TAATTGCCAA TGTAATGGTT CTGGGAGCCT GGGCCTTAAG AGATAATTAA GATGGATTAA TGTCTTTCCC
 ATGAGACTGG GTTAGTCGAG ACTCTTGCAA AAGCATGTGT TCGTAAAGTG GGTCACTCTC CTTGTCTTG TCTCTTTTAT
 ATACACTTCT TTCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCCTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAAGA GGAATTCAA TGAGGCTGA TGGATTATG GACCAGAACA ACAGAGGGGT CTTGAAGGAA
 GGAAGATATA GAAAAGGCAA GGTGTGGTT AGAGAGGAAA TCCAGAGTT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA
 GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTTCAAAT AGCATAATGG ATATCTTTGA
 CTCCTACCCT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTTAT ACATACATT
 ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTGATTTAG ACTCTGCCCA TTTTLAGCTG
 TATGACTTAC ATAAGTCATT TTGTGTCCAA GCCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA
 AATCCCCCCTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTGTGT TCTTCTTAA GAGGCTTCTCT ACTATAAAAT
 GTGACCTATT TACATTTTAA GTTGAAGTAG CCCACAATAA TGAATAATCA NTTIAGATTT TCCTCATCTC CTTTGGGAGA
 AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTAC AGTTTTGATA
 TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTCAGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC
 CACTGTCTGC GCTGATCTGG GNCCTTTTCT CCTCTGCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT
 TTTTCCAAAG NTTTTGTCTT TNNCACTTCC TGGTGCTGT TCCACAATTC AATAGATGCT ATAAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTGTN TACCTCAGTC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCCTCCTC ACCTGGGTTT TGAGTGTGTA
 CCCCTTTTLAG AGAGTGAGAT GCCACCCGGG CAGCACTCGT TAAAGCTGGC CAGCAGGAGT GACTAAGGGG AGAGAGCATG
 ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA
 GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

COENGAGTGT GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCOGTC TCCAAAAACA AAAAAACAA AGTTGAACTA
 TAACTGAAT TCCTCCCAAG GTTAGTTTCT CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGTTAGA AGCAAGATGG
 NGTCAGGCCA GATCTCTTTC ACTGTTAACA TTTTCTCAGT TATAATTTTT GCAAAATGTG TTTTCACTCC TGCATCCATA

224

ATACCTAGAA ATTTTGATAA ATACTTGTTA AACAAACAAA AATAAAACAT CCACAGCAAG GANTCGACTA TAAGGCGTTG
GTGG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

GGGCTCATAAC ACAGTTTAT TCCCTGTGA TTTTACAGAC ACTCCATCCT GCAAGCCCAT TCCCTTGGA AACCAGAAA
GAGTGGGCAC AGTGCTCCCT AGAGGAATAG AGGGGACAAG ATGGCTGCCA GGGAGAGGC AGTTGAGGCA CTTAGGGATT
TACTCCGGCC CTGATGGAAG ATCTGGTGCC CAGGGTAGGG GGAGAGGGCC TGGGCTGGGC TGGAGCCTCC TAGGTATTTC
CCAGAAGCCC CTTAGGAAC TGTACCTGG ACTCCAGCAC CACCCCTCGT CATGTTGTCA CTTCCTGTGG TGGCGGGAGC
GCAGG

SEQ ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCGGTT GCATGAGGCA CTTTGTCAAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT
AAGACCCAGA TCCACGCACT CAGGAATTG CTCTGAATTT CAGTTTGACA ACAGAGAAGT AGAATATTTT TAATTAGCTA
ATATATATAC ACATTTTITA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG
AGAGANCCCC ACAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTTTATTA TATACATATC AGTACTCACA ATACGTGCT TATTTAAGAT GGCTGTTTAT AAGTATAAAG CAGTTTGAGC
AACACTGATT GTGCATTATT GACTTCAGA TGAAAAATCC TTACATGCGG AATCAATGTC TTTTAAAATT TCAGATAAAG
AATTINCATT TGAGGNGACA TACAATTGTA AGTGCTCATT TTTTGTCAT TTTAAGACAC CATTATGTGT AAGANGGATT
AATTTTNCCA TAAATTACA AACACCCCTC ATGTCTTGAC ATTACATGG AAAGGGCAGC ATAACCATT AATCATCCAA
ATGCATATCA GAGCAAATC CTAGGGCCCT TAGGTGTGAG GGTGGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTT TATCTTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG
TTATGGCGCA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT
GATGGAAGT TAGACCCCTA TTGCCAGTG TACCCAAGCC TCCTTGAACC TTGCCT

SEQ ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTTTTTTCC CATAGCACGT ATCACTCTCT CATGTGTAC CTGCTACACT AGAATTATGA CCCCTAAGAG GGAAGAGACT
ATGTCAGTAT CATTGATTCT NATTAACACC ATTATTAGA ACCATGCTTG GCTTAAAGTA GTAGCTGCTC AGTAAATATT
TATCTATGTG TGAATTTTA AGINCTTCCT TTATATTGAN TTAAAATTAG TCTCTGTGT GCAGCAGTCT GGGTTGTCT
TATGTTGAAA TACTTATGTA GACTTCTACA TACATT

SEQ ID NO:713: (Length of Sequence = 354 Nucleotides)

AAACTTTTACA ACCTGCACAT TTGTTATGCA TACTAAATGG TGTGTTAAAA TTAGGGTTTC TTTGCCTCTC TACTACTACAC
TAATCTGCCT AAAGGTGGTT GTTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTTTAG GTAGAAAATT
ATCTGATTTA AATACAAACA TATTTTCTC ACATTGAGTA ATATGCATAA TGTAGTTCCA AATGTATTTC ATTACTATAG
TCACAATATC CAACTAAAA TTACGCTATC TAGAATTGTA CCANCCAAA TCTCGTATTG GCAGATCTTG ACAGGCTGGA
CCTGCAAGNA TGTGGCTTGG AATTTTAAAC CCAT

SEQ ID NO:714: (Length of Sequence = 349 Nucleotides)

225

CAGTAATTCT CTTACATCCT TCCCAAAAAT CAGTGTCTAG GGACTAGTTG ATCTGGATGA GTTATACATG ATATTTGACT
 TTNCATAAGT AGTGAAGGT TTTACTAAGT AAAGATCTGA GTTCTTGGT ATCTGACGTT TGTATACAGA TGGTGTCCAT
 TTGCTCAACC AGACAGGAGT TAACTTGTAT TAGAATTGTT TTINCTAAAG TNAATGTTACC TGAGAAATTA AGGACTGCAC
 CTGGTTTAAT GTTGCTTCAC TTATCCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGCC TCGAGCATCC AAGCATGATT
 TTCTGTGAC AAAATCTAAA AATCCAACC

SEQ ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTTGAAA AGATCTTCAC CAAAGATATA TGGATAGTAA GTAAATATAT GAAAGGTTTT CACTGTTAAT GATTAAAGGA
 AATGCAATCT TGTACATGAA TGTTTATAAC AGCATCATTC ATAAGAGCCA AAAGGTAGAA ACAATCCAAA TGTTCATCAA
 CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAAATATTA CTTGGCCATA AAAAGAAATG AACTGGGCCA
 GCGCAATGA CTTACGCCTG TAATCCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEQ ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTTTTAG TAGAGACGGG GTTTCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TGTGATCCG CCCACCTGG
 CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTGGGTGTA TCTCAGCTCA CTGCAACCTA
 CCCCTCCCAA GTTCAAGTGA TTCTCTACC TCAGCCINTT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT
 GATTTTCCTA TTTTINAGTTG AACTGSCATT TCACCAGNT GCCAGGCTG GTCTCGATCT CCCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTTT TGTATGTTGA TTTTTATCA TGCAATTTCA CTGAATTTGT TTTTCAGTGA TAACAGTTTT
 CTTATGGAGT CTTTGGTTTT TNCCAAATAC AAGATCATAT CATCTGCAAT CAAGGATAAT TTGACTTCCT CCTTTCCAAT
 TTAGATGCC ATTATTTTTC CTCGTGCTG ATTGCTCTAG CTAGGATTC CAGTACTATG TTGAATAACA ATGGTGAAAG
 TGGGTATCCT TGTCAATTC CAGGTCCTG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAAA CATAAATAAT ATTAGAAATG GAAAAGTTAT AAATCAACTA CAGCAAGGNT TTAAACTAT TATGAAACAA
 ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTTCT TTCATAAATA ANTGACAATG GGGGAAAAAG
 A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TTTTTTTTTT TTTTTTTTGA GACAGAATCT CGCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCTCG
 GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG
 GGGCTGTGAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

AGAAATGAAA GCTACATTAA CGAAAAAGGA ACTTAGGAAT GAGGTCATTA AATATAACTA ACTACATTTT AAATACGGAT
 ATCATATATT TCCTGATTAG TATCAGGTAA ATATCTAGAC TCCTATCCTG AATTCCGGTC TCAGATAAAA AGGTCAGAGA
 CAATTACAAG GAAGATGCTT CATATTATCA GGTCAGTATA TACCTAATTA TGTGCACTGG AGAGTAATTT ATTCTTCATT
 ATCAATTGTA AACATGTTTT TTTCACATTT TTGTAGTTGT CCATAATGTA AGCTTGTGGG TTTGATTATT GTTTTCACA
 CTGGATCCAG CTGGTTTAAA CCTATTT

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

226

AAAAGATTTG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCAGATGAA AAGATGCTCA ATATCATTAG
 ACATTAAGAA AATATAAATT AAAACCACAA TGCAATATCA CCTCGTATCT ATTAGAATGT CTAATATTAG CAAGACTGGC
 CATATAGAGT GTTGGTGAGG ATGTGAACAA CTGAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT
 GGAAAAGAGT TGGCTGTTTC TTCAAAGTT AACATTACA TCTGCCATAT GNTCCAGACA TTCCACTCCT AAG

SEQ ID NO:722: (Length of Sequence = 266 Nucleotides)

ATCGTCCAC TGCCTGCAG CCTGGGCGAC AGAGGAAGAC GCCATCTCAA AAACAGAAAA AAAAAAAAAA AAAAAAAAAA
 AGTGCAGCTC TCTAATGGG CTCTTTTACT TACTATTTAT ATAATAAAG CCACGTTCTT AGGCTGTATA ATGGGGTTAA
 TCATAGTAAG TACCTTGTA AGTTACTGTG ATAACCAAT AAGTGANCAT AAGTAAAGCA TTTTACATGT GTGCAGCTTA
 ATAAGTTGGA GTTGTGACTA TTATTT

SEQ ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTCATG AAATAATCCA TGTAACATCA CTTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAAC
 AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGTCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT
 TTATGCTTT GTGGTAGTAA TGGATTYCC TAAAGCTGTT TCCCTCTGAT CATTATAAT CCCTGTACAG CAAAGGACTA
 TTGTCTTTG GTATGAGTAA ATAACCCTGT TGGAAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA
 TATAATGCAG GTGCCAACAC CCAAGGGCA TGACCAGGGG TTCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GGACACAACCT GAAGTGTGGA AGAAATGAAA GGGCGAAGGT GTGTTTTGAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA
 GAATTCCTCT CTGGACTGGC AATTGCGATG TACCATCTGG ATAATCACCC AGAGAAACAG TTCTCTACTG ATGTTTTGAA
 GCAGGCCATT GAGCTGAGTC CTGATAACCA ATACGTCAAG GTTCTCTTGG GCCTGAACT GCAGAAGATG AATAAGAAG
 CTGAAGGAGA GCAGTTTGTG GAAGAAGCCT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGCACTGC AGCCAAATTT
 TACAGAAGAA AAGGTGACCT AGACAAAGCT ATTGAAGTGT TTCAACGGGG TGTGGAAT CCACACCAA CCAATGGCTA
 CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAT GCAGANTACA GGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACCTAGT TTTGTGAAAG ACTCACAGTA TCACTTGGTT TCTGGACACG GTTCGAGACC
 TGGCTGTGGC TTGCTGTGGC CTTGAGAGCC ATCCACAGC AGCAATGCTG TTGGACCCIT TGGCTGGGAC CTTCAGGACC
 CCCTGCAACA GCACTGTGTN CCTAACCTGC TGGCATGATG CCCCCTTNTT GACAGGGCTG CATACAAGGC CAGCGACAAG
 TGGCAGGCAG TGACGCCAGC CTGGATTGTC TGAGGGCACA CGCCATGCTT CCTGCAGTGC CAGTGCTCTT CTNGGTCCAC
 TTTGCAGCAA GGATAGATGT GGTTCAGAT CCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GTGGTAGAGT AAATCCTATT ATATCGAGAT ATTGGTCAGG CAAGAATTTT NCTTTTAAAA TAATTTATTG TAAATGAACC
 ATAAAAATTT NACCTTTGTG CCATCTTCTA GGCTATAAAA TAGTCTTATA AAGAATCAGA TTGTTAAGAG TATATGAAAT
 GTGGATATGG ATGTGGAAGA TCATTAACGA GSATGATGAA AGCAGATTAA GAAGCTTTCT GATGGGTACA AAAAATAGAA
 TGAAGAAGAT CTAGTATTTG AGAGCACAAC AGGGTGACTA TAGTCAACAA TAATTTATTG TGCAATTTCA CATAACTAAA
 AAGTATAATT GGGATTGTAA CAGAAAGGAT AACTGCTTTG AGGTGATGGG ATACCCCAAT TTACCCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)

227

CCTTTAAGC AGCGGATCCC CTGGTCCCCA CCCCCAACTT TATATTCATT AGGCCTGAGG TGGGGCCTGG GAATCTGGAT
 TTATAATTTG CTCCCCATATG ATTCCAATGC CAGTGGGTTT TAGACCACAT TTTGAGAAAC AGTGCTGTAA ACTGTTTTCC
 ATTTGCAGTG AAGGAAAATG TAGGGTTTTGT GTCTGAAAC TATGCAGAGA AATTGAATAG TATTINAGTC TAATCTTGCT
 TTTAALTAAC ACGGAAATTT TGAAAGTCGG CTTTAGGGAG TTCCAGAACC TGTCCATGAA CAGCAACAAG AAAGATCCCN
 GTGTGAAAT GAACACTGGT TGGTAAAA

SEQ ID NO:728: (Length of Sequence = 305 Nucleotides)

TGTTTATTA TAATCTTATA CAGTCTACAT AAATTGAACT TGTATTTAT TTTGGTTCAG TTATAACATA GCATAATAAA
 AATCAGCA CTGGTCTCT GAAATAAGC AGGCAATCAC CATTCAATAA ACACACTTGA TTTATTTTGT ATAAAAGGGT
 TAAGTTTACA ACTAACTTT TATAAANGT TTAGCATGAA TAAGTACATC ATTACACTTT TGAATGCAGA AATAGACATC
 TCTGCCACTA TACAAGAAAA CTCTAATTAA AGAGTTCACA AGGTTTCACT CAAATAGATA TATTT

SEQ ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACATTT ATTTTCTIAT TTTCCATGAA GAAGGAGAGG GACAATTTTA GATTCACCAG TGTGCAGGAC AAATTCCTAC
 TTAACCTATA GAGGAGCAAA CTTCTTCAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTTCTCG
 ATGTAGCATG ACTACAAATT GTCACAGTAG ATTTTGGATG ACTTTACCAT AGCCACACTT AATGAATTAT TATTNATATT
 NCTATTTGTA CTTTAATAAA ACTATATTTT AAACTTTAAA ATTGTCATTT AAATTAATAA AGAAAATGAG TAGTTCCCAT
 AATGAATCCA TAATGTTANG AATTGCTTT AGCAAATGAG GACTATATTC ACCTANGCTT TTG

SEQ ID NO:730: (Length of Sequence = 311 Nucleotides)

CTCTTTTATT CCTTTAACTG CTTAACAAAA GAAAGAGTCT CCAAAGTTTA AAAAACCTTT GAAAAATATA CAGCTTGATA
 TTATTTACAT AAAATATGAN TCCAGGTTCC AATATCAAC AAACATTGCT ATGTCAGAAA CACAGTGGAA GGCAGGAACG
 TAACTCACTG CCTTTTAGAT GCAAAGACTA ATAGACACGT TCTCCNATCT CGACTATCTT NGTTACCTGT TATCTCANA
 ACATAAATTA TTANGGCACC TENGAGGTTG GATGACTACC GAAAATGGNC TTCATACCTT CTGTATGATT A

SEQ ID NO:731: (Length of Sequence = 349 Nucleotides)

AGGGAATGC ACAGAATTCT ACTAAAATAA CAGCAAAATA AGAGAGCATG AATTACATAT CAAATTATTT AAAGCAAATA
 ATTAA-CAAA TTTCTGGAAC AGACAGAAAG CAGATGAGTC TACCAAGAAG GATAATAAAC AATGACACCA GAGAAAAACC
 ACAACCTGAA AACTTAAGAA AACTGCCTAA GAGGTGTGAG CCAGAGCTCC CAGGAGCCCT ACAGTGCTCC AAGCTCAGAA
 CTGGCAGTA TCAAAGTCAA GAATGCTATG GGGTAGCTAG GCTCTTGAC TTTCTCTTCT CTCTCCATTC ATAGACAAGA
 AAGCAATCT ACCTTTAGGT GGCTAGAA

SEQ ID NO:732: (Length of Sequence = 370 Nucleotides)

AAATTGTGTC CTCTAGCCTA GAAGCAATCA AACTCCAAT GGTGCTGCTG ACTGANCTAC GCATGGATAC GCCATTCTTC
 TGAGG-CCCT TAGACCAACC CCAGGAGGAG CCTGACTTC TGTCCCCAT TTATGCCCC TTTTCAAGCA GGAAGTAGCC
 AGAAAGAGTC ATTGCCCAA ACCACCTAAC AGCAGTTGGG GTGACGTCTC CACAGGGGGG AAATGTTATA GGAGTTATTA
 AGAAA-TATC TTAGGCAGAT AGAGAGCAAA AGGGGTCTT GGGAAATTTT TGTTCCTTTT AAAGTAGCTG CAGAAATGTT
 TCTTG-CTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEQ ID NO:733: (Length of Sequence = 357 Nucleotides)

TTTTTGGTG TGTAGAGACA AGGTCTTGCT ATGTTACTAA GGCTAGAGAT CCTTTTAAAA TGTCTTTCTG CTAGGTTGTT
 GGGCC-TCAC CTCTCCTTTG TTTCTTCTC CTCTCCAGC TTCTCTGGAT TCCATCTGTT TCTTATACTG AGAAGTTTGC

228

TACCTAGCTA GCCCTCAACC TCTTTGTTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGT
ACAGAGCTGT TAAATGGCAG AGCATGATTG AATCGGGCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG
CCTCGGTTTC CTCTCTNGCA AAACAGAGAT ACTAATG

SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGTGAAAGA AGAGAAGGAA ACCTTGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC
CTGCCCTGCT CTGTGTGCAT CCTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCCTT TCATGTCCCA GCCCTGGNTC
TTGGACTCAA CCATCCATTG CATCCCCATG GAGGATTCTG CCAGTCTCTA GGACTCAGGA GCAACCCAAG GATGTCCAG
GGTCACAGGA AGACTTGTG AGGGGACCCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATCTTACA AGTCACGGTG GGAT

SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

CCCAGCGCCT GGAGAGCCAG CCTTGCAGGG TGGCTGGGC GAGCCAACT GCGTTCCTGG TGCAGGGCTT CCGGTCTCCC
TAACAGACCT TATACGCTGA CCGGCGGCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGAGCAGCC ACATTCTGTC
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCCGG TGCCCTGTCA GCGGCTCATG GTGCCAGAG
AGGAATTTTA GTGSCAGCAT TCCGGCTGTC ACGCCACCGA AATTGCCAGG NCACTCCAAG TCAGAAGGAC CACCAGGAAA
AGTCAGGAAG AGAACCACCC ATCAAGGT

SEQ ID NO:736: (Length of Sequence = Nucleotides)

ACACTCCTGA CCTCAGGCAA TCCTCCACC TCAGCCTCCC AAGGTGCTGG GATTACAGGC ATGAGCCACT GCGCCAGCC
TACACACACT CTTAATAGAA GAAATGAATA ATCAAAAAAT ATTATTGTG GAAAAATGT TTGAATCTTA TTTTAAAAAT
AATTAACGNT TTCAATAGGC ATGTTGAACC TTTTTCGGC TACTGTTTTC AGCAATTGCA GTTGAATGAG TACAAAATGC
ACCACAGAAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTTCATG TATTGTTACA
ACCGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

367

SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATT AAACCTCATT TTATACAACG AGTGATACA CCACTGGGGG AGTNTCTGAC TGATGCTGG GAGGGCGGGC
GGGGATGCT NCAGCTATGA GTAGGGAGGA GCGGGGAAG CCTGGGTGC TTCTCTCTT CAGCTGACCG CTGTGTGTTT
GTCCCAGAG GAAGAGCGN NGCAGTCAG CCCCGGGGG GATGGCAGAN TGGAGAGAG GACCTGCAGA AGTGGTGGCC
AAG

SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCCTGCAT GGTCAGAATG
GCTCTGTACC CAACGGGCAG ACCCCTCTNA AGGCCAGGAG CCGCGGGAG GAGATCCTGT AGCCACCTGG TCTGTCTCTT
CAGGGCAGGG CCAGCACAC TNCOCGGCCA GTCTCTTAC CTCCCGASTN TGCGGGCAGC TNCGTCCCA GCATCTGCTG
GTCATTTGCG CCTGACAGTC CCAACAGAA CCCCTNGGA CTGAATCCA GAGANGTCT CCAGGNAACC CCTCAACGAA
GCTGTGAAAT GAAGAGGTTT CCTCTTTAAA ACTGGTTT

SEQ ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTTCTGGC CAGGCACGGT GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCCGAGGC AGGCGGATCA CGAGGTCAGG
AGATGGTCTA GACCATCTG GCTAACACAG TGAACCCCTG TCTCTACTAA AAATACAAA AATTAGCTGG GCGTGGTGGC

229

GCGTTAGTAT TTCCTTAAAT AACAGGTTAC AATAGAAAGA TACTGCCTGG AAGTTATCCT TTTCATTTTG GTTCATTTTC
AGTTTTTGT TATGATTAC ATAGCTGTTT AATTCATTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA
TACCTGTTAT TCCCTTCAAC ATCTGCATT TTTCAAGNTT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCTTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATCGTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGGCAGC CAGACAGAAA GGTCAGGTTA CCCACAAAGG
GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC
TTAAAGAAAA GANTTTTCAA CCCAGANITT CATATTCAGC CAAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT
ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACTNCCAGAC CTGCCTTACA AGAGGTCCTG AAAGGANGCA CTAAACATGG
AAAGGGNATA ACTGGTACCA GNCAGTCAA AAACATACCA AAATTGTAAA GGGA

SEQ ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTTCA TAATAATGTA ATAAACATTC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCTTGGCAA TCATTTCCCTT
GACTCCTCCA GTTGTGGCT ATCATGATAT TCAGCCCCAA GTTCATCATT TCTGTTTTTN CTTCTATACA GGTTCCTTAT
ATGTATTTCT AAAATCATT GGTATTTCA TCTTTGTAAG AATCATTGT NCTATTTTCC CCACTAGTTC TACATTCGAT
TCATATTGTT GTGGGTGTG GTAATTCATT NATTTTGACT GCTGTATAAT

SEQ ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTTT AGGAATTTNT TTCTATAGAG TTCTTCATTA ACATTTATAC GAGTTTTTTG CTGAGTCAGA
TGGACAGTGG GGTTCGATG CTTTTCCTT CCGCCTGCC AGGCTGGCCC AGGCAGTGCT CCCACCANTC TATGAGCGTN
TCCGGGGCCG NGGATCTGGG CAGCATCCAT GGTGCCGGGG CCATCCCCAG CGGNACCACA AGGTNGCAGC GTTENTCCAC
GAAANACCN CTTTCGCTC TGCTTCCCCA AAGG

SEQ ID NO:743: (Length of Sequence = 398 Nucleotides)

TTGCTTTGCA GTTATCTGGA ACTCCTGCTG CTCTTTCAGG AGCTCCTGGG TGTGCTGTAT ACTGGAGCCC GTGGAGGTGT
GTGTGGAAAG GTAGAACTCG CCATTGTCAT GGATCCATTC CAAAGCCTGC TTGGCACTCC TCTCAAAGAC CACGTACTGC
TGACACTGCT CCAGCGTCT CTTCCTCATG GTCCAGTAAT GCAATACCTT GTTCTCCCGT TGGAGAGGTT CATTCAGAT
ATTTTTCCT TGCTGTTGAG GAGCTTGTAT GTGCGTCACC ATTCTGGCA TGTTCACGCT TGTTCCTGTG CAGGTATTTT
AGGAAGACGT CTGCATTTCT CCGAGCAAGN GGTGCAAGCC TTCAGGAATG CCTCCTTTNC TNCAGGGTGC GGTTTTCA

SEQ ID NO:744: (Length of Sequence = 359 Nucleotides)

TGCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGCAG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCGGGT
TCAAGCCATT CTCTGCCTC AGCCTCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCCAGCTAA CTTTGTGTAT
TGTTTTTTT AGTAGAGATG GGGTTTCACT ATGTGGCCA GGCTGGTCTC AAACCTCTGA CCTCGTGATC TGTGCGCCIN
GGCCCCCAA AGTTCCTGGA GTACAGGCGT GAACCAACCN GNCGGCTGG GGCTGCTTAT TTAAATCCCC TAGAAGAGG
GATTCINAG CTACACCACA CCTTAACCTT NGAAGGACC

SEQ ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAAGTTTAT TTTTAAAAA CGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTTACTGT
TATTTGCTAA CTCTGAAAAA AAAATTTTNC CCTCACAAC CAACCGGCAA ACTCCTGCCA CTCTAGCT TGGTGGCTGC

230

CAGCGTGCAC TGCAGGAAAA CGGTGGGTGG AGGGATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG
TGACAAGCTG CATCTGGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TTTCTCCNT CCCCINCACC AGCTCCACTT
TTNCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

SEQ ID NO:746: (Length of Sequence = 285 Nucleotides)

GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAATAAGAA TAGTAACATA
GCTTTTCAGCA TCCTGTGCTT GAACATCACA CATCTACAAG TCTTTCAAGN CTTAATGCAA CAGGAATNTG TCTGGAGACC
AGCAAGANCA TCAATAGAGA GCACTGNTCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCACAC AACGGATTNT
TAGGGGAGGA TTTGGGNGAA GCAGCCCAT TGCCTAATAC ATTGG

SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGTT TTAGAGTGCT CATTCTTTCA ACTTATTTGA CAAATATTTA CTGAATGTCT GCCATAAGGC AGTAAAGGCA
CAGAATGACT CAAAGCCTTT TTNCCCTTAT GGGGTGTAT TNCITAGTGGT GGAGACAGAC AATGAGCAAG TAAACAATCA
ATCGGCTAAT GATAACTACT GTGAAGAAAA TAAAGCAGGN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGTTAGGGA
AAGCTTCTTT GAAGACATGG CAGCTATTGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

SEQ ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC ACTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAGAA
GAATGCTCAG TACGTTTGIN ACTATCAGA AAGAAGAATC TGGAGGTCCCT GACGTGTAAA CAGAGTTGTG GGTACCATCT
CACCAGAATT GCTGCCCTGA AGCCAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCATTT CCAAGAAGAG
AATGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAT TTTTAACTGA AGTCCAGGA
GCATACAAA AGCCAGGNA TTTACC

SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAACTTTA TTTTCAAAAG CTTAAGGCC AAATACAAAC TGAGGTCTTC CTTCCTAACA AATTAATACT AAAATGAAAC
AGCTTTTNTT GTGTCCTTAA GACAAAATAA GGAAGGAAAA CGTAGCTGCA GTTGTCACG ATGGATATG GTTCTTTTAA
ATATATCTGA AAGTAGTAGT CAGAATGANT TATGGTTGGA AACTGAGGN ATCTTCTGGT TGCAGGTGCA AAGTACTTT
NTTATTCTT GTCTCAGTCT CTTGATAGC CACTTCATC TGCTACTACT CACTTTCTC CTAAAATAC TTCATCTATT
TTAG

SEQ ID NO:750: (Length of Sequence = 341 Nucleotides)

TGTATTTTNA GTAGAGAAGG GGTTCGCCA AGTTGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCTGCCT
CGGCTCCCA AAATGCTGGG ATTATAGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TTNAGGAATT
CTCCAGGCCA CGAATCTTGG GGCAATGAGC CTCTCCGTA CCCACAGCA TCTNGGGAG CTGGTGTGCT GATGGGGTCA
GCTCTCCAG CTGCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNAGC TCACTGCTTT
CTAACATTC TCATTTGTTT G

SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTTGAGA CGGAGCTTNG CTCGTGACC CAGGCTGGAG TGCAGTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT
TCTCTGCTT CAGCTTCCA AGTAGCTGGG ACCACAGATG CCGCCACCA TGCCCGGCTA ATTTTTTGTG TGTGTTT
TAGTAGAGAT GGGGTTTAC CATGTTAGCC AGGATGGTCT GGCCCTCCAG CTTCCTCTGA GTCCCTTCAT AAACATTTGT

231

TTATCTTGTA AAATAATTTG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTC CTAAGNCCTT
TCTTGCCAAG ACTTTC AAG CCAAAAACCTT CACAGTTTT CCIAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCTGGGGC AGCTGTCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNTGGCT
TCGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCCGTGG CCTGCACTC
TTTNGTGCTG GTGTCCCGCT TGCCCTTTNT CCGGCTGTTC CAAGCGCTGC TAAGCCTCAT CGNCCCNAG TACTTTINACA
ANCTGGCGCC CTGNTGGA GCAAGTGAGT GGCCATCANT CGTGGTCATC TTGNCCTCAT NATCCAGCT TTGGCCCCCTG
GTGGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTTCAACT TGGAAAGAAG GATGATGCAG TTTTGGGCCC TCCGGCCATC AATNACCGAC AGNCCTTTGA CCTTGCGGGA
AGCCAGGTAT ATGINTTCAG TGGAGCCCAG CTCTTTCTGG TGCTCTGGT AGGCTGAAAA CATCTTTTCA AAATCCTCTA
GGTCCAGNT CCGAAATACC TGCATGTCAT CAATCTCATT CCATACGGTG CCAGGGACAC GCTCCTCATT CAGCTTCACC
CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGGACAC GCTTTTCTCT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAAGTAG CTCTGTAGGG GTGAGGAGGA CTGINTCTGT TATCATCCTT
GATTGINTTC CTTCAAGGAG CATTGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTGTGTC
AATGTTCCAC ATAATGCAA TGCCATACGT TGTGTGAATA TTATGTTGGA ATACAGTGCT GATATCTTGG AAAACCATAA
CTGCCTCTTA ATTAAACATA GNGTAATACA TAGTNCCTGA TTTTTTTAA AGTGAGCTNT AATGGGNAAG TATTTTINAT
ATGCTTTAGC TATAGCTAAA GG

SEQ ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TTCTCAGTCC TTCTCCCTTT CTTTCCAAGT AGTTACGGC CCTAGGGCGA AGGTGGCTTT TATTTCTCT
CTTGGGGAAG GAGGGGGAGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CCCCCCAGC AGGAGGGGGC
TGGAACGTCT GATCATTCGG AAGGAAGGGT TCGTCTTGT CCACTTCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG
GGTCACTCCC CTTGGGGGTG GCAGCTCTG CATCAGTNGA GGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG
G

SEQ ID NO:756: (Length of Sequence = 368 Nucleotides)

TGGCATGGTT GCATGTCCT GTAATCTCAG CTACTGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT
TGCACTGAGC CAAGATCGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCAATT TCAAAATAAA TAAATAAATA
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAAT ATTTTAGCAG AAGTAAATAT GGTTTAATT
AATGGAACA GCTCTGCTCT ATNGAAAATT CACAAATATT AAAAATAAAC AACTCTACA TTAAACCTCT GAGCACTAGA
NGCTTACCTA CTTAATCATA GGGCTCAT ACTGTAAGGG GGTAAAT

SEQ ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCCACTGC CAGGTTATCG TCCCGGAAG CCCCCACCC CCTGNTTTC CTCTCCGCT TTCCCTAACC CGTCTCGGG
GGGCATCTAC GNTCTGCTCT CGNCTCTCT CTNCTCGAAC TCCCTTGTG CTGCGGCGT GGCGTCTGG TACTGCTGGT
ACTCGGACAC CAGGTCTTCT ATGTTGCTCT CGGCTCGGT GAACCTCATC TCGTCCATGC CCTCNCCTG NTACCACTGC
AGGAAGGCCT TTGNCGGAA CATGGCCGTG AACTGCTCGG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC
CGATGAAGGT GGCCGACAT

232

SEQ ID NO:758: (Length of Sequence = 356 Nucleotides)

TTTTTTTGTA TTCTTTTGT ATATGGGTTA AATGTTTCCG TTATATTCC TAATTGGCTA TTGCTGTAT AAATAGATGT
 GGTITTAGGC ACATATTTTA TATCTGGCTC CTATACTAAA AATCTTTTAT CATTTCACAC AGTTTTCAGT TATGCTCTTG
 GGTITGAAGG TAGACAATAA TGTCATCTAC ACATAATGAT ACTNCTGTTT TCNCTTTTAA AATGCTTATA GCTCTTINAT
 TTTTATGCT TTGCTTGTGC TATAAATNCT AGAATGAAGT TAAATAATCA TAGCAGATAT CCTTTTTCCT GATTTAATTA
 TAATGCTCCT GAAATTTTAT TAAGTATGAT GACTGT

SEQ ID NO:759: (Length of Sequence = 333 Nucleotides)

GCCATGTGGG GCGGGGAGG CGGTGGGTC GCGCGGGGG GACGGTCAAA GACTTCATAA ATAAGAGGCG GGTCCCAGAC
 CCNCAATTT GTCAACATGT CTAAATAGG TGCAATATTT AAATCTTATG TACAACAAGA ATCACTTTGC ATAGCAATGG
 TGAGGACACA GGACGGGTGC AGTGATGTGA CTGGGTCTTC TTGTCCCAAG GCGGGGGGC GAGTTCGCAG CTCAGCTCGG
 AGCCTCTAGG AAGAAAGCAT CCTTCGTCCG GCCCGCAATN GTGGCATCGG AGTTGACTTT TCCCACACGA CGGCATCAAN
 CACAAAGGCA AAG

SEQ ID NO:760: (Length of Sequence = 311 Nucleotides)

CGTCTCTCT GCGCAACCG CCCCCACCA TTGCGAGGA GGCTGAAGAT GGAGATGGGT CCGGCAGCAT CTNCGGTTCC
 ACCGGAGACC GCTTGGTGGC ATCAGCTTGC CCGGCCCGGC CGCAGATATT CCGGCCTCGA GAACAGCTCA TGTGAGAGC
 CAACAGCCTG AAGAAAGCAA TTGTCAGAT CATAGAACAC ACAGAAAAAG CTGTGCATGA GCAGAATGCC CAGACCCAGG
 AGCAGGAGGG CTTCGTCTG GGGCTCTNIN AGTCAGAGGN GAAGATNGAC CACAGAGTTT GNCCACCACT T

SEQ ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTTAAG AGACAGGGTC TCACCTCTTT TCCAGGCTG GAGTGCAGTG GCAACGATCA TAGCTCACTG
 CATCTCGAA CTCCTGGGCC CAAGGGATCC TCCCCTTTG GCTTCCCAA GCACTGAGAT TGCAGGCGTG AGACACCTCA
 CCTGGCTTGT CTGAGAACAT CTTTTAAAA AAATCCCTTC TCTTGGGTTT TCTGTTACCC ATATGTCTAC TCAATTGGT
 TGCTCAGCT TTGTGTGTGT AATGCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

SEQ ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAAGGAT ATAAAAGTTG AAATTAAAAG ACACATATCA TGAAAATACT AACAAAAAGC TATAATAGCT ATATTAATAT
 CAGGTAAAT AGACTTTAGG ACAAAGCAT TATTAAGGAA GGGAAAGTTG CTATAATAAT AAAAGGTTGA GTTAATCAAA
 AAGATATAAT AGTTTAAAC ATTATGCATA TAATTAANIT CCTCAAAAAT AGACAAAGCA CATATTGATA CTTAAGGNAG
 AAATTGATAA ATCCATCACC ACAGTGGGAA ATTAGGAAGT TTCTGTACAC CTCTTTCACT TGTGATAGG TCAAAATGGA

SEQ ID NO:763: (Length of Sequence = 369 Nucleotides)

TCCAACTCC TGCCAGATAT AATCTAAAA ATCTGTTTGT TAATTTTATT ATTTTATTTT TGGATTTTAA AATGCTTGGG
 AATTGGGAGA TATGCACAAT TGCTTTTGT TTGTTACAA AATTAAATGC GTATTTGGGT ACTTATAGGA CACTATTTGT
 AAAACATTT ATTTCTTCAG ACATTGATGG TCTGTCCCA GTTATTAACA ACATCTACAT GTTTAAGAAT AAATTTCTTA
 TCTACTCTT ATTCATTGA AAATTACCTT TCTATCTCC TACTCTGGAA GTCTTTATGN ATTCTGTCTT AATCATTAGT
 ATCCCATTC TTCTTCAAGA GGATGTCTGT CCAAGTAGGAA TTTCTCCCA

SEQ ID NO:764: (Length of Sequence = 381 Nucleotides)

CGGGTAGCAG TTGCTGAGTG TCAGCTAGAC AGCAGCGACT AGGGCTCGGG CGCCGGCGAG ATGCCCTTNT TCACCGCCAA
 CCCCTTCGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATTATG GACATATGTG

233

ACAAAGTTGG AAGTACTCCT AATGGAGCGA AAGATTGCCT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGTTCACAT
 GTTGTCTGC AAGCACTAAC TCTTCTGGG GCTTGTGTGG CAACTNIGG AAAGATATTT CATTTAGAAG TATGTTCCCG
 TGGATTTTNC AACAGAAGTA CGTGCTGTGA TTAAAAATAA GGGCACATCC TAAAGTATGT G

SEQ ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCTGCTT GATGCAGGAG CTGAGGAGCT GCACAGAAGG TTAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC
 TTGCTCCCCA CAGGGAGAGA AGAGCTCTGG CCTCGGAGA AGCCAGACC TGGGAGCTCC TTGAGCCCGG GCTGTGACTC
 CCTCTTTGGG GOCCTGGTTC GCGTCACTGC ATTGCCAGT GCCACTGTTC GAAGCTGCTT GTNATGCGCC TGGTCCAGGG
 GGAAGCTGTT TGTGTGTGC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCCC AACCTGGGCA
 GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCAGTGGCAG GTAGATTTTA TTGGCCTGGG ACACACAGGG GATACCTCA CCCACGATGG GGTGGGGGGT GTGGTGTGA
 AGATATAATC TNATGGTCAC TTGTGGTAGA ATCGGGGTT CTGGCTGTNT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG
 CTGGTAGCTG CAAACCGAC TTTCCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGGAAG CAAGGAGTCC AGGGGCTGGA
 TGCAGAGCTT GAGTCGGAGA AGCCAGTCTG CTGGTATGCA TGTNCCATCT GCTTTTINCA GGNCAGGGCA CCACCAGGCT
 T

SEQ ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCGCCCCCT TAGTTCATA TTCTGTCCCC GTACCCAGG GCATCATAGA CACTCAACAA CCATTGCTTG AATATGCAAT
 TGGATGAAAT GAATAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTATGGG
 AGAAAATTAG GGAATGAAA TCCATAGAAA GGGTTGCCT AAGTNAGAT GATGACTINGA GCCAGAAGAC ACCCGGGGGA
 GAGGAATINT TTCACATGGT AGGAAAAGGG GAGGAGGGAG AGAGGTGGGG TGGTGGAGTN CAGCCTCGAG GCT

SEQ ID NO:768: (Length of Sequence = 372 Nucleotides)

TCTCTCTCT GCGTGTAT ATCTGTCAG TCCTTAGTAA CCCCTGTGGC CCACTTCTTA CTTAGGTCTC TCCTAACATG
 TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCTNCT TATACTTTTN CAGTAATTTA AATTTTATCA TTCTACTGCT
 TGTTCAATAC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTCGAAGG GGTGGAAGT TATCTGCTGC
 CTGGGTACCC CCCCAGCAT ACACAAGAGT ACATTTTAA CACATTACAC CTGAGTGATT GINGTAAAC ACAGATGCAA
 TCTTTCCACC ATCCTCTAGG AATCTCTCTG TGGGCTTTCC ATTGGGTAC CC

SEQ ID NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCAGGGG AGGTGACCGC CGAGGAGGCA GCAGGCGCTT CCCCCGGA GGCCAACGGC
 ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTCC CCCCCTGTGA ACGGAACAGA
 TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCCTAGCC AGGGTGCTGA GGCCAAGGGG GAGGTCCCCC
 CCAAGGAGAC CCCCAGAG AAGAAGAAAT TTNNTTTCAA GAAGCCTTTC AAATTGAGCG GCCTGTCTT CAAGAGAAAT
 C

SEQ ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGIGATG CCTCCATCTA TGGTTTTTGA AAGTCATCAG CCAGAGCTAA GGTAATGAGG ATTCCCTCCT
 TCATGTTTAT ATGTCTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAAA CCCCTGGCCA ATTTCTCCAG GCTTATGCTC
 TCCCCGGTTT CAGTTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTG TTCTTGGCAG CTTGTCTATA TATTTNATTT

234

ACCTCTCTTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCTTA
GACTTCTATC TCTACCTCTC ATCTGACTTG GCGGAGGAT TAGG

SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGT CAAGTGATTC CTGCTCCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC
ACCACCATGT CCAGCTAATT TTTGTATTTT TNATTAGAGA CAGGGTTTCA CTATATGTTG GCCAGGCTGG TCTCAAACCTC
CTGACCTCAA GTGATCCGCC CACCTCGGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCCC GGCCTAAATT
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTTC ATATGTTTAC TAATTATTTT
TNTTTTGTG GATATATCT: CTGGAAATCT ATTGAGG

SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTATGT ACCCTTTAAC CAGCAGTGT GTACCTAGGT
ACAAACTTTG CAAGCACACA CGCATGINTG TNCCAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATTCTACA CAGCAATGAA
AAGGAGCTAG AGCTACATGC AACACATGG ATACAACCTA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAACCCA

SEQ ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAAGA AACATCTTCC TATAAAACT AGACAGAATA ATTCTCAGAA TCTGCTTTCG GATGTGTGCG
TTCAACCCAC AGAGTAAAC TTINCTTTTG ATAGAGCAGT TTGAAACAC TCTTTTGTGTA GTATTNCAAT GTGTATATTT
AGAGCGCTT GAAGCCTACG CTAGAAATGG AAATATCTCC CCATAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG
TGATGGCTGC ATTCACACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTCTGT AGAATCTGCA
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

SEQ ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTCGCTCT TGTGCCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCTCCAG GTTCAAGCAA
TTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCAGCTA ATTTGTATT TTNAGTAGAG
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTGAACTCC TGACCTCAGG TGATCCGCTT GCCTCGGCT CCCAAAGTGC
TGGGATTACA GGCATAAGCC ACTGCGCCA GCCAGAAGAT GCATGATTTT TTAGGATCAT ATGCTGTTTG TAGCCATAAG
GTAAATCATG TCTCTTCAA TCATGACTTT TGGGAACCTC CTGAATAATA AAAATGAGAG TTGAGAT

SEQ ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTINCT TTCTGCATCG TTCTGTCTA AAAAGGGGTA CTACTATAGA ATAGAATGCA GGCTTAGGAC CCCCCTAAGC
TCACTGTICA ACCCAGCCCA GCAAACGGT CAGTTATAAA TTTINCTGCA GTCCCTGAA ACAACAACA AAAACTGGAT
GAGGTTTCCC TCCATCTTG TTTTATGTC TTGGGAGCTT GACCTTATAA CCATACGCGG GTACTTTTNC TTGGTCTCTG
CCATCCAGGG AACCAGAATT TGGGGGGTTA TGTATAGTT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA
GCTTAAATTT GACTGCTGTA GNTCTTCT GGGGAAGGAG CAATGGGAAA CCTTNCCAAA GCTTATAGCT CANCCAGCTG
A

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)

235

AACACTGGGT AAGCACTTTG TATGINCTGG GCACTCTGCT AGAGATAATG TGTCTGGAAT TGGTGGGTTT TGGTCTCAC
 TGACTTCAAG AATGAAGCCG TGGACCCCTG CAGTGAGTGT NACAGCTCTT AAGGTGGCGC GTCTGGAGTC TGTCCTTCT
 NATGTTTACA TGTGTTTANA GTTTCINCTT TCTGGTGGGT TGTGGGTCTT CGCTGGCTCA GGTGTGAAGC TGCAGACCTT
 TNOGGTGAGT GTTACAGCTC TTAAGGCGNC GGTCTGGAG TGTTCGTINC CTCCCGGTGG GCTCGTGGTC TCGTGGGCT
 CAGGAGTGAA GCTGCAGATC TTGCG

SEQ ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCAAGCCCA NTAAATGCTAT GGCTGTGCA GACTTGTAGA GGTACTGCCT TCATGGTCTT NGGTAAGATC
 TGGGAGAATT CCTGGATT A CAGGCAGAA ACTCTNATC TCTTGCTTA CTCCCCCA AACAAATNAG TCTCTCTCT
 TCTCTCTCT GAGCTGCTA GAGCTGAGG AGGGGGTGAC ACAAGCACAG CTATGTCAAC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

CAGAACTCA GGAATAAGC CATTAACTT CAAAGAATAT GTTGTGTGT TCGATATTTT CCATTCTTAA TCCACATCCA
 CGTTGGTCAA GTAGAGCTT CTAATCAGAA GCACAGCAGT TGCCATGGT TTCTCTTCCA TCTGAAAGCA GCAATTTTCC
 GCAGCGTCCA TTACAGAAT GTGCCATAT TACTCAGAT CTAAATGATA TTAAATATGC TTTGGAACT TAACAAGAA
 CGTCAAGCN CTCAGTAAAG AAAAGTTGT GAAAACAAA ACTGAACAGC AGGCTTCTAG TTTCTCTCT CCAAAATGG
 CTTAGTGGG ATTCAAAAT GGAAGTGTG AATAAACTG C

SEQ ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CTGGCACAAT CAAAGACCTT TGGTGGCTTC CAGCATTTAT AAGGCAGAGT CCAACACAC ACTTAAGAAT
 GACTTACTCC TCTGGGGGAC CCCACCTTC CCTACCCCG CTTTGGCTCT GTCTCTCTGT GGAGCTGCCC CTGCCCCTAA
 AACTGCTC CTCTCTACCA ACCCGGACCA TATTTCCCT CCTCCCTCA CCAGTCCAG CAGTACCCAC CAOSTTTGTG
 GACATCTCCC CAAGGAGCTC TCAGTATCA GAAGCAAGGA GTTAGCTTC AGCCCACTT CTGTGCTTA GGTCTACAGT
 GAGTNTCCAG TGATGCTTC TACCGACTGC TTGGGGGTGC ACAAGAGTNA GGCCAGCAAG ATNCCAGCGG AA

SEQ ID NO:780: (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTTCC TTTTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGGGANT
 GCCTGGTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATATC CCTTTGTGAG AGGTAAACA CTGAGTTAA
 ATTTTGGAGG CCAGGTGTGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GGGGCCAAGG TGGGCAGATC ACGAGGTCAG
 GAGATCAAGA CCATCTTGC CAATATGGTG AAAACCGTCT TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA
 CGCTGTGGG TCCAGCTAC TTGGGAGGCT GAGGCGGAG AATCGCTTGA GNTGGGGAA GTGGAGGTTG CAGTNAAGGT
 GAGATGGGC CACTGCACIN CAGCCTGGN TGAGAGAGCA AGACTTCCGT TTC

SEQ ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTCG GGAGGCTGAG GTGGGAGAAT CGCTGAACC TGGGAGACGG AGGTTCAGA GAGCCGAGAT TGGCCATCA
 CACTCCAGCC TGGGCGACAG AGTGAACTC CATCTCAAAA AAAAAAAAAA AGAACCACCA CTNTAACTGA GAAATAGATG
 NTCCCATTA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCAACTCATG GTTCCCTTT
 TAAGGGCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGAGT CATACCTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GTCTGGGCT CTGACCTCA GGTGATCTGC CTGCTGGC CTCCAAAGT GCTGGGACTA CAGGCATGAG CCACTGCACC
 TGGCCTAATT CTACATTTIN ATCTACAGCA GACCTTTTAT CATAAAAGAG TTTCTATAAA ACATTTCTCA AAAGAAAATA

236

TGTATTGACA TTCTATTTTC TTCTCTCTCC AGATACTATT TTTNGGATTT NAAACATACA CAATACTTAG GAGACTTGT
 TTACTCAGAG TGGAAAATTT TNCAGGGAC AAAGTCAACA CAANGAACA AACACAAAA AATAGCCAGA AAGAGAACAG
 TTAAGTGACG CTCGGTGAGT CCGGGCAGTT CCTTCCCGGC ACTGGCTCGT CCTGGGGTT CTCAGGTTT CATGCGGCCA
 CAGCGTCCGT CCACCTGTTT CACGNGAGCC ACATGCTGGA ATT

SEQ ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTTCAGGC GGGCACAGTG ACTCATGCTT GTAATCCAG CATGNTTGA GACATAGCAG TAGGGACTAT CGACAAAGAA
 ACACACAGAG GGAAAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC
 TGGGTAACAT GGTAAAACCC CGTCTCCACT AAAAATACAA AANTTAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC
 TACTTGGGAG GCTGAGGCAT GAGAACCCTT TGAACCCGGG AGGTGGAGGT TGCAGTGAGC AGAGGTCATG CTAATCTCAA
 GCCTGGGGCA ACAGAGCGAG ACCCTGTCTC

SEQ ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTGCA AATTACACAT GTGAAAAGCA GTTAATATCA AAAATATATA AGANACTCAA
 AGGACTATAC AACAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANINA TTINCAAAGA AAGACATACA
 TATAGCTTGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAAC CAAAACAACT CTAAGATATA
 AACTCACTCC TGTTAAANTG TTAA

SEQ ID NO:785: (Length of Sequence = 363 Nucleotides)

GTAAAGNTTG AGAAATCGGA TGGTGTCTGT GTCTGTGTAG AAAGAAGTAG ACATGGGAGA CTTTTCATTT TGTNCTGTAC
 TAAGAAAAAT TCTTCTGCTT TGGATCTG TTGATCTATG ACCTTACCCC CAATCCTGTG CTCTCTGAAA CATGTGCTGT
 GTCCACTCAG GGTAAATGG AAAAAAAGAA AGAAAAATGA AACCAGGAGT TGGCAATTAC TTTTTTTTTT TTAAAGACA
 GAGTCTTGT CTGTACCCCA GGCTGAAGTG CAGTGGTGAG ATCTTGGCTC ACTGCAACCT CCACCTCCCA AGCTCAAGTG
 AATTCTCCAT GCTCAGNCT TTCAGAGTNA CTGGGGATTAA NAA

SEQ ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TGCTTTTAAG GATTTAAGTG ATAGTAAAGA TAAATGTGAG TTTTAAGAAT GGGATTTTTA
 GACTAGGCTG ACACAAGGGA TCTTCTTNA ATAAGNTCT TGAGCAATTG TTTTTTTGA GCTCATCCTT AAGGGCTGGA
 CAGGAAGAAT CCTGTGTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG
 AGAAATGCAT GAGTGATTIA ACGCACGNT GGGTGTAGTC ATTAATGTTCC T

SEQ ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTTCTGTA TAATTTTINAT TATGACCATA AAAATAACAA TGTAGTCAAT AACAAITTA TGTACATTT TAAAATAATT
 AAAGTATATA ATTACACTGN TTGTAATAAA AAGTATAAT GTTAGAGGTG ATGGATACCT TATTTACCTT AATGTAATTA
 CTACACATTG TAGGCCTGAA TGAAAATATG CCATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT
 AATAAATTC AATAAG

SEQ ID NO:788: (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGTTTTGAGC TCAAGCAGA CGGCAATCA GCAAAAAGCA AAAATAATGT ATCTTACTGC
 ATTACAGACA AAAAAAAGAA AAAAAACAGA GTGAACTAG ANCTATTTTC AATAGTAGTT TTCTGACAGC TATATAANCA
 AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTGTCCATG TATCCTGCCT GCCAGCAAAG GTAGAGATGG

CTGTNATATT TGTAATGGTT TACTATGAAG GCTGTTCAT AACCTNCAAT ATCCACTGNT CTTGGGTGGT ATACCAAGGA
TA

SEQ ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGIGGC ATTGTTTTT NITAGAAAAC CCTTAGTAA GCACTTCTCT AACCCAGAAT AGACACTGGG TATCTCCAA
GAGTCCCAT GCTTTCATTT CATCTCCAC CCTCTCTGA GAGGGGAGG CAGGGGATAG GGGTGGTGT AGGCAGTCTC
CAAAATGCCC CTCTAGACC CCTGAGAGAA TTCATGTTGC CAGCAATAA CCAACAGCAC CTCAGTGGGG CATCANAGGG
CCCTCTAGGC TCAAGGCTAT TGCCAAAGGG CATTCCTGTT TTATGAGCTT CACGATGGGA ACCAAGGNAG GCTCTGCAA
GACTTCCTAG GGGCTTGGTC CTTCAACTTA TGGGCCT

SEQ ID NO:790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGTCTGAAC TCCTGACCTC ATGATACACC CGCCTTGGCC TCCAAAGTG CTGGGAATAC AGGCGTGAGC
ACTGCACCCA GCCTTGTGTG ATCTTTTAAA GTACAGTTC CATAGATTTA CATTAAGAAT AAAAAAGTCA TGACATCTG
CTTTTATATG GCAGTTTACT CAAGCTTTT AAAGAAAGAG CATTCATCTT GCTTTTACGT GGTTTTAGAA TGTGAAAAC
CTTTTGNIAA ATCTGAGTAA TTTACTGCAT TTNCCATTAA TTCAGCTTAG TTAGACTGCT GNTCCAGTG CTTTGTTTTG
CTGTACATA TACCCTAATA TGCTTTTAA CATATGNCCA AATTC

SEQ ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACTCCA ACCATAATGG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA
GCCTAGCAAA TCTCTGGAA GTCTGCGCTA TAGTTACAA GATAGTTTGG GGTGAGCGGT GCCACGAAAT GTCAGTGGCT
TTCTCAGTA TCCTCAGGG CAAGAAAAGG GAGATTTTAC TGGCCATGGG GAACGAAAGG GTAGAAATGT AAAATTCCCA
AGCCTCTGC AGGAAGTGCT TCAGGNTAC CACCACCACC CTNACAAGN GATATCTAG GGGGTACTCA AGAGCAT

SEQ ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TCCAGGAATT TGTGAAAAGA TCCTAACTT TTCAACATG TCACAGGTAG TACTTGAAGT ATGCTTGGTA
AAATGTACCG GTTAAAGCAG TATGTTTCTC AGATAGCCTG AGATTTTATT TAACAATTAT GTATCTAAGT CTACTAATAC
ATTGAGCAA AAGAGTGTG GTNCAATAA TAAGANGTCA GTATTTCACT TAGATTATTT CAGAACTTG TAAGTNCCTG
TAAATAGCTA CTCGAAA

SEQ ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGTCACTCTN ACTTAAAAGA AACATTTTAG GTTCACACTT GCCAAGTTAG GAAGAAAACC AACCTTAGAT
CCCTTCCCC CCACCAATAC TCCTTTCCCC AAACACCGTC CCCACCGNC TCTATGTTA ATTGAATTTT TATTTGTGAT
ATATAGAAA CTAACCCAT GGCTGINATG CTGAGTGTCA TTTGGCTTCA AGCTCGAACC AGGNNACAGC TTGGCCTGGA
ACCTGAGAC AAGATGCTGG CTTCAANAAG TGGGGGCTCA CG

SEQ ID NO:794: (Length of Sequence = 330 Nucleotides)

GTGAGGCTG CAGGGAGCCA TGTTCACCCC ACTGCACTAC AGCCAGGGTG ACAACAAGAA CCTTTCTCGG CGTGAACCCA
GGGGGCGGAG TTGCAGTGAG CCAAGATCGT GCCACTGCAC TCCACCAGCC TGGGTGACAG ASCAAGACTC CGTCTCAAAA
AAAAGTTTAC TACTCGGCTT TAATTATTTC GTTTCGGTTT TGGGTGAAAT NATTTTATTA CTGACTGGTT CCTAGTTGT
ACAGAAGCCT ATTATCTTTA GAGAGACTCT TCATGGTAAT TAACTCAGAT TCTTATTTTG CCTGGGTGAA AGGANGGCAA
GTGGATCTAA

238

SEQ ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATATC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA
 TAGGTTATCC TTGGAGAGTA TCCAGGGATG TCTCTTINCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTNAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC
 AGAAGCAGAA AT

SEQ ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGGA CAGCCTGANC TCCTGCTCA TAGTAGTGGC CAAATAATTT GGTGGACTGT GCCAACGCTA CTCCTGGGTT
 TAATACCCAT CTCTAGGCTT AAAGATGAGA GAACCTGGGA CTGTTGAGCA TGTTTAATAC TTTCTTGAT TTTTINCTTC
 CTGTTTATGT GGAAGTTGA TTAAATGAC TGATAATGTG TATGAAAGCA CTGTAAAACA TAAGAGAAAA ACCAATTAGT
 GTATTGGCAA TCATGCAGTT AACATTTGAA AGTGCACTGT AAATTGTGAA GCATTATGTA AATCA

SEQ ID NO:797: (Length of Sequence = 337 Nucleotides)

GGCTGCATTA TGACAAGAAG TCAAGCTTCA TGACAGTTAG TATGGGCTGG AGTCTGCAAA GTCTGAAC TG TATCTCATA
 GAATGATTC AGGTTTCAGG GTGTTCCACC TGCCAGAACC CAAACTACA ACTATGGGCG ACACAAGGGA AGTTTTAGAA
 ATCTCCCTCT ACACGCATTT CTGGTTTCT ATTATTCTC CATGGCAGCT GACAGATCTG GAAGTGNAAA TAGGGGATTC
 TCAAAATCAA AGCCANGAAG ACACCTTGTG TGACACCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TTINGNCCAG
 GCATTTGCTG GGAACCT

SEQ ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCCTGGA AGGTCTAGGC TACAGTGAGC CATGTTTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC
 TCCAAAAATA ATAGTGATAA TAATAATAGT CATTTATTTT AAGTCTACAT GCTGAGATGC CAGAACAAGT AAAATTGGAT
 TATAGATTCA AGCAGTATGT AGGTATACTT TCATAAATG AATACTGATG TAATTTTGGA TGATTAAAAA CAGNCTTTTA
 GTAGGTGTTT AAAAATCTGG NTAATTCCTT TCATGNCATT CAAACATTTA GGTGGCCTGT CTTTGTTTTT TTAGGNTATA
 ACTTGCAAAC ATTCANITGT T

SEQ ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGTA ATGAATTCAT TTAATATAAA CTTTAGTATA GCAGAATACT ACAGGTTACC CAAATTTAAC CCTAAAAACA
 AACAAATGAC AGGCACITCA GTGAAATAAC AAGCCCATGT TCAATATAA AATGCTAAAA GTGAGAAAGA AATTATGAAA
 ATATATACCT TTAATTTGCA GACATATAAA CACTTTTGGT ACAGTACAGA TGCATGATGC CAAAAAGTAA AATGNTCCAG
 TTTAAGCTAA CACATTCCTT GTTTATACAG NTTATTTTNC TATAGCTCTC ATATAANANA AATATTNCCA GCTCACACAA
 TG

SEQ ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGTT GTGTGGTCTA CCGACTGAGC CTGCCAGATA ACCCTGTAGT ACAATTTTIN CAGCATAGTG GAAAAGAAAG
 CCATGNTCT GGGCAGGTCA GGGTTTGANC GCTAGTGCTT TGTATTAATG ATCATGATGA TAGCTAGTAG ACAGGGCTTA
 CCAGATACTA GGTGCTCTCT TAACTGCITT ACATATGTA GTTAACCTAT TTAATCTTCA TGACATCACC CCTGAGATAT
 GGGTAATATT ATAATGCACA TTTTATAGGT GATGAGAGTG AAGCACTGTC ACAGATTACT CCAGCTTAGT TCATAGCAGA
 GCTGGGACTT TTAATCAAG GCACTAGATG GTTCCAGAGC TTTGTACTAC TCTTCTGGG TCTTTCACAG TCTGAGCTGG
 TCCGG

239

SEQ ID NO:801: (Length of Sequence = 408 Nucleotides)

CTGCGTTCCA TGTAGCGTCT TCCACAGTNC TCTGTTATAA GATGGTTTGT TACATTGCTG CAGATATTTC TGCATGTCTC
 TTGAGTTTCT CAAGACCAGG GTTGTATTTT TCCATGTCTG TCGATGAAAC AGTACATGAC AAAAGAAGGT ACTTAATACA
 TGTTTGATAA ATTAACTACT GTTGGGTAAA TTAATTATG AAGGAAGACC CAGACTGGTT CTGATAAATC ATTGATTACA
 TTTTACAAAT TTGGATAAAT TAGGGGAGCC TTGAGAAGTT AGAGCTCTAG GGAAGGTTCC AGGGAACTTT TGAAGGATGT
 GAAATATGGT TTTCAAAATT CATAGTTTAT TGCAGGATTC TGGNATACCT TCCCAAGTGA GGGGNAAGAT GAGGAAGANG
 ATGGGCCTT

SEQ ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCCTATCA TAAGAATAGC TTGGGAAAGA CCCACCCCA TGATTCANCT GGGTCCCACC CACAACACAT
 CAGAATTATG GGAGCTACAA TTAAAGATGA GATTGTGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTGNCCTTC
 TGCCAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCCG CACCCATGAA AAGATTTAGA GAGTCACACA
 GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCCTGGNCT TGCTATGTCAT TAAGTGGTGG GNTCCTTCAG CTTTCACATN
 TTCAGGCAGT GGGGTCAAGA AAC

SEQ ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGGCCTT NTCTAACGGC ATGTATGACT TGCTATGANT CTCTAAAGCT GAACTGGCCT CACCTCANCC TGTCTTGCTG
 GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GTNATTACCT GGTGNTGAA GAAAGACAGA TGGCAAAATT
 NATGCTGTGTT GGGGATGACA GC

SEQ ID NO:804: (Length of Sequence = 312 Nucleotides)

TTTATTACT GCGTTGTAA ATNATCACA AACATATTCA TTGTCAAGTG AATGCACAGG CTTTCAAAGG TGATTGTATT
 CTGCAAGGTG GGGAAATAGC AACTACCTTC TAAGGTGAAT GTCAGCCTG CCATTTCCAA CCCCAAAGT CCTCTAGATT
 CTCAACAGG CAGCTTCTGC TTCTATGCTC TTTTGGGAAA GGTGAGCCT GTGTAGAAGG CTTAATACCA ACATGCAGAT
 CCACCTGAGA ATCACTGGAA TGCTCTGGAC CCAGCTGGAA TGCTTCCGGA ACCCAGTCAG GCTTNCGGAA AT

SEQ ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAATATA AAAAANTGCA GGGCCTGGTT GCCACATAC ATTCTCAGG TTAAGGTGGA TTAAAGATG
 CCCAACAGAA CCCAATGAAT CAGAAGCTAA AAGGGACACT TCAGTGATCA GCAGACGCAT TCTCTCAGT AACAAATGGA
 GGGAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GGTGCTATTT
 GCAACTACAT ATATTAAAA TACANGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTAAACAGA NCATTTCAG
 ACTGCTACAC AGAAAGGGAA GGAAGCTGT TAACCCAGCA CAGCAGACA CCTCACATAT TTCCGTCTCA GAGGTAAAT
 GGGAAAGGAAG G

SEQ ID NO:806: (Length of Sequence = 287 Nucleotides)

GCATTINAGT GCTGATACAG ATACAGTGAG TTCTGCGCT TTCTCTCCT NTATATTGAA GGGATTATAA ATGAAGCTCT
 TTAAACATTC TGAGATCTNT AAGTTGATTT CTACATGAAC TCCAGTGGT GTTAATGACA TTTTCAGAAA AGATGCTTTA
 CTAGCTGAC AAGAAAAGT ACTCTGTAG CCTTTATTTG TATGTGATAA AACAGAGTTG ATAAAATAAT CTACTATTAA
 CTTATCAATG CAGTCTTACA GAATCCACCT ANTTACAAAG TAGATAA

SEQ ID NO:807: (Length of Sequence = 369 Nucleotides)

240

GGCAGATATA ACCTTTTCTC AAACATCTCT AATTGTCTGC ATACCCCACT AATATTGGCT ACATAATACA TTTATTTTGT
 TTTTTGGGA CTAAGTGCCCT TACTTAGTTT TGNCAGTGT ATTCAATTAAT TGAAGAAATA CTTATTCAGG ATTTCTATTA
 CTAGTTTTTG CTCAATATAT TCACTAATTG AAGAAATATT TATNCAGGAC TTCCATTATA TGAGCACTGG CCTTTGTGGT
 ACAAAGATAC AACATGAATC TGAAACTCAA TTTAATCTAG AAAGATTTAT TAATATAANC TCATCAGAAA AGCAAGNCAT
 CTACTGTGAT AGCTACAGTA TTGGTTAGAA ATGGAAAGAG AGAGCAGAT

SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTTGT ACCAGCCGCC ATACTCTCCA AAAGATGTCC CATCCTTTTN CTTTCCTTGG CATTCCTCTC TTTCTTCAGC
 ATGCATCCAG ATGGGTTTAT TTTTCATCATC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA
 GGTGTTCTGC TTGCTTGAAC TTTCTTGTGTT TCAAATAGCA GGATGCCAGG TTATTTTNCG TCTTAGCCAC GTTGGGGTCA
 TCAGGTCCCA GTTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTTCT
 GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

SEQ ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TTCATGTCCA GTGAGCAGTG TTGCGTTTTT CCTGTAGCA TTTGGAAATG ATTTACTGGA ATTACAAAAC
 CTATTTTCCC TTAAATTTT AGCTTTGGCT CTGGCTGCTT TTTAGAATAA TGCAAGATAA AAATCACACC TGAGGGCTGA
 AAACGAGAG GGAATGGGAG ACTTGATAAT TAAGCAGCTT GAATGTTTTT CQNTTNCITT ATTTTAAAG AATGCACTT
 GCCTATGATA CTGTCTCTCC AGTGAAATGA TTACTCTCC ATTACTCTAT TGATACANTA TTGTGCATGC TAGTGTGTGA
 TTTCTATACA GTAGCTTGAA AATTGATTAA CCT

SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGTCAATG CTTCCAGGC TCGAGTTGAT GCCCAGGT GTATTGTACG AGCATTGAAA GATCCAAATG CATTTCTTTT
 TGACCACCTT CTTACTTTAA AACCAGTCAA GTTTTTGGAA GGGAGCTTA TTCATGATCT TTTAACCATT TTTGTGAGTN
 CTAAATGGC ATCATATGTC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACTTG GCCTGTTACA TGAACAGAAT
 ATGCAAAAA TGAGACTACT TACTTTNATG GGGAAATGGCA GTAGAAAATA AGGAAA

SEQ ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA
 GAGGACGTTG CTGTTTCCAC TGGCTTCTAA TTTTGCAGAT GCAATGAGCA CTTACGGCTT TTGCAGTGGT TCAGGAAAAG
 GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCCTCTGAT GGCTGCATGG AGCCAGCGGT GCTGTGACTT TTTTAAATAG
 TTTCAGTACC TTTNATACGT ATGTCTTAT TTACTCTTA TCTATGCTCT CTCTCTCCA TCAGCCTGGG AGCTCCCTGG
 GGCAGGTCTG TTTCTCCCT CAGTCCGA NTTCGCAGGA GCTGTGCTC CCCATCACA CTGGAGGCT GTCTNAAGGC
 AGGGGCTGTG GTCTCTGCCA TTAGACTNGA AGCTCCCAA GGTAAAGGT CATATCTCA AAAAAGCTTA GAATAGCTTA
 GGAACCTAGG GGT

SEQ ID NO:812: (Length of Sequence = 337 Nucleotides)

AAATTCACAT ACTTGTAAGT NATGCAAGCA AATTCTCACA TAATTATTTT TAAATGCTAG ATAGTTGGTA TAATTNCAAT
 CATTTTAAAT ATGTTAAGAC TTGTTTTGTA CCTAACATG AGGTCTATNC TGAAGAATGT NCCATGTGCA CTTGAGAAGA
 ATGACTGGAG TGNCCTTTAT ATGTATGTA GGTCCAATTA GCTTATAGAA TTGNCCTAGT CCTCTATTTT CTTATTCANC
 TTTTGTGTTG TTGTTGINCT ATCCATTATT AAAAGTGGG TATTGAAGTC TCCTACTATT ATTGTGCTAT CATCTCAGC
 AACTAACAC AGGANCA

241

SEQ ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGTGGCCTC AGNNCAGCCA AGCTGACCTT GGCATTGGC TGGCTTCTNT AAGGCANTAG AGTGCCACCA CATAAGCNCA
 CCACCTNTCC CCACCTCCTC CCTTCTCTCC CATGCCACCC CACTTGCTTC CAAGGGCTTG GTTCCAAAG TNACATCCAG
 GGTGTAAGAG GTTGGGGAAA ACGTCCTGCA AGNTGGCTCA GGGATCTNAT TCCATCAGAT GGTCTCATGA ATACTGTGGG
 AGATTAAATC CATCTCAAAA TAGGCAACCA ATGCTATATT CTGAATNINA GGTCTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTTGAGCC ATCAGAATTC AGCTTTTGTG GATAAAGAAT ATGAACATA TGAATATGGA TGAATTATT GTATATAGTC
 AGCTTGCTGA ATTATTGGTT AAGCACTACT AACTATATCT TGGTAACTA TGGTGCACT GAGCCACCCC CTAAAAGCAA
 AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAAACAAA TGAGAGCCTA TGAGANTGAA ATGNTTTCAG GTGGAGTTTG
 ACAATACAAT TCATCCNTAA TATATAGGEN NAAATATTTT CTCAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT
 GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEQ ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTINACT CTGTTTTCCC AGGCTGGAGT GCAATGGCAC GATCTTGGCT TACCGCAACC TCCGCTGCT GGGTTCCAGC
 GATTCTCCTG CCCCAGCCTC CTGAGTAGCT GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTTTTC CATTITINAGT
 ACAGACGGGG TTTCACCATG TTGGTCAGGC TGGCTCGAA CTCCGACCT CAGAGGATCC GCCACCTTG GCCINCCAA
 GTGCTGGGAC TACAGGTGTC AGCCACCACA ACCGNCCTAA TTAATACTTC TTGAAATTTT A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTTTAACA TATTAAATA GACATGAGAA AATGTGTCA TTTGATAAAA TGGGGGAAAT GTAATAAATG ATTACCAGAA
 ATATAAAATT AAGCCGTATA TGCNCTTAAG TAAATCGAAT CTAGGCATCC TTAAAATGTA AAAAAGGNTG CAACAAGAGT
 AAGNGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG
 NGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAATNCT CCTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

TGGCATGCGC CTGTAGTCCC AGCTACTCAG GAGGCTGNGG CAGGAGAATN CCTTGAACCC AGGAGGCAGA GGTTCAGTG
 AGTCGAGATT GCACCACTGT ACTGGTCTCA GCCTAGGCAA CAGAGCGAGA TTCCATCTCA AAAAAAAAAA AAAGTTAAAA
 NTAATATGCT AACTATGATA CAAACTGATA GCAATATTGT CTTAGATTTC AAAATAAAAA TAGGG

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAC CTGTAGTTTC ATTACCTTTT TGAATAATGN CATACAAAAA ATGTATTGNN TTTTGTGTC TGTGAGAATT
 GATGTTTGTA GATTAAATAT CATTGTGTTT AGAATTACAA AATAGTTTTT AAATATTGTC TGAGAAAAGC CAAAGTTAAT
 GCAACCNAGT GGAACTGTA AGACCNTTTG AGTATTGTTT GTTTTATTGG ATGCATTGG ATTTT

SEQ ID NO:819: (Length of Sequence = 280 Nucleotides)

TTGACTAGCT TCCTACGTCA TTAAAAATTC TTAAATAGT CTGTCTTAAT GGCTGCAAAT TTTGTCTGTA GTCTGGGCTA
 AAATCTGATG AAATGTTTTA CCTGTGGTTA AGTAATTTAG CAACTCGTAT CTTTTAAAA TATTACAACCT GGGNATTCTA
 GTACGTCACA AACATTTGTN ATATCATTTA TTTTGTGCCA TTGTCTGTGC TATGAAATAC AGTAGAATGA AAATTTACTT
 CAAAGCATTC ATTNTCTTCC CCCAGGGNAT GATGGCAAAA

SEQ ID NO:820: (Length of Sequence = 328 Nucleotides)

242

CCAGTTAATT TTGTAAAGTT TATAGNGATG GTTTCAGTTA GACCTGTGCT GTCAATACAC TAGCAATTCA CATGCACATT
 TAANITTTAAA TCTAAGTTTA AATTTAAATT AAGTTAATAT TAAATAAGAT TTGAAATGCA ATTCTCAGTC CTACAAGCCA
 TGCTTCAAGT GCTTCATATC CATGTGAGGT TAGTGGCTGC TATACTGGNT AGTGCAAAAA GAGAACATTA TTGTAATCAT
 AGAAATTCTA TTGGTAAGTT TATGGGGTAG TACATGGACT AGAATGTAGT GAGGTAGTGA GCTGTGGATG CAGAGAAAGG
 NCACTGGA

SEQ ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATTGT TTTCTGATG TMTGAGATG ATTATTGGT TTTCCTTTT ATTGIGTTAA TTTGGTGAAT TGCATCANCT
 TTAGTATCTT AAACCAACCT TGCTCTCTA GGTAAACCT TATGTGGTCA TAATATATAA NCCTTTAAAT ACATTATTGG
 ATTNCTTTT TTAATATATT GCTGAGGATT TTTCATGACT ATAATCATAA GAGATATTGG CATATGATTT CCTATACITG
 TAATGNCITT GTTAGAAGGA GTTTATATTA GGNITATNC TGGCCTCATA AAATGGGTTG AGAAATGTCC

SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATTGT NITCCTTGGG AGCCCCTGAC CCGGCTACT CTTCACCAGA CACGGCCCCG CTTTGGCCCC CAACACAGCC
 GTCCACCCC TGGTTCCTTC ACCTTAGCAG TAGCAGTAGC TCTGGGTGGA GTTGCCAGAG GAGCTGACAG GCCCTCTGCC
 ACTGCTGCCA CCCCCAGGSC TAGGGAGGGA ACAAGAGCC TGCTTGTCTG GCTTGACAT CCAGCATGCC ACAGCTGCAC
 TACGGNGAGG AGGTCAGACA GTCCCCCAA CAAGNCCCCG ATCCCTCTNC TCTCCACCAG GGAGGGCCCT GGGCTTTGGG
 CCCACAGNAC AAAACGTTCC ANCCCGGGCT GATCATTCTG GGTGGCAGC GG

SEQ ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CCTGGGGAAA ACCAACGAAC AGTCTCTCA CAGCCAAATT CACCACAGTA CTCCAATCCG NAACCAAGTG
 CCGCAATTAC AGCCCATCAT GAGCCCTGGG CTNCTTCTC CCCAGCTTAG TCCACAACCT GTAAGGCAAC AAATAGCCAT
 GGCCCATCTG ATAAACCAAC AGATTGCCGT TAGCCGGCTC CTGGCTCACC AGNATCCTCA AGNCATCAAC CAGCAGTTCC
 TGAACCATCC ACCCATCCCC AGNGCAGTTA AGCAGNGCC AACCAACT

SEQ ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAAGACAA GGAGACCAAG AATGCTGCCA ATGCCTCTNC ATCCAAGTCG
 GCCAAGACCG CCACTGCAGG ACCAGGAACCT ACCAAGACGN CCAAGTCATC TGCTGTGCCC CCAGGCCTCC CTGTGTATTT
 GGACCTGTGC TACATTCTTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTTCAA GAGAGTGCGG TCTTCTACT
 ACGTGGTGAG TGGGAATNAC CTTGCTGCTG AGGAGCCCAN CCGGGCTGTC CTGGGACGCT TTNTTTGGAA AGGAAAAGGC
 TCAGT

SEQ ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATTG CTCCACCCCC ATTAGCAAAT ACCGTAATAT ATGNTCTTAG TAATCATCCT CTCACAATTG
 TNCCTTTTCT AATTNNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC
 AGAAATTGTT AGTCTCAAC TCCAAGGCTT GCCTGTGCAA GCCCTGTTN CCGTGTCTC ATAAACCTTG TCAGGCATTT
 ATTTATTGAG CACATATCTA CTGINTCTG CACAAGAAIT CATAAGGTTT TGATGAATTA TGTCCCTTCT GAGTGGGA

SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTATAGGG TGINATTTTC TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAAACC
 ATGAGAAAAC TAACANTTTT ATGGTGATTG AGAGGTTCCA AGTNCCTGGN GTTTTAAAAA AATCAGTTTT TAAAGATAAA

CAAACCTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCACGGTGG GTCTTGAATA
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEQ ID NO:827: (Length of Sequence = 426 Nucleotides)

TTTTTTTTGT TTGGGACAG AGTCTCACTC TGTCACCCAC GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA CTGCAAGCNC
TGCTTCCCGG GTTCATGCCA CTCTCTGCC TCAGCCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT
AATTTTTTTG TATTTTTAGT AGCGACAGGG TTTCACCGTG TCAGCCAGGA TGGTCTCGAT CTCTGACCT CATGATCCAC
CTGCCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGCCGGATGG TTAAAACATT TAAAAATAA
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAACCT CTATATGCTT GCTGGTGGGG AATGCAAAAT GGGTACAACC
ACTTTTGGGA CAAACAGTTT TAGTAA

SEQ ID NO:828: (Length of Sequence = 402 Nucleotides)

GGCTGCTGC TCCACTCAA CAGGTATCTG GGAGCCAGCA CTCGGCAGT CCTTCTAAGC TCTAACTCTG GTTTTACTGT
TTINNAGGTG AAACCTTTGT CCTGGGAAT AGTCTGCCCC GCTCCTTGA ACCACACTCA GACTCAATGG ACTCTGCCCTC
AAATCCCACC AACCTTGTCA GCACCTCCCA AAGGCACCGG CCTTGTCTT CATCCTGTGG CCTCCACCA AGCACTGCCT
CAGCTGTGG CAGGCTATGC TCCAGGGTA AGCTTACCAG AGTCTGGCC CTTCTTCCCT CCTCACTCT TTCTTCACT
TCCTTCTGA GCTCTGGGAG GCCAGAGAGG ACCTAGCTCT GTTGCCTCT GNTCTGTGGT GGGGACTAGG GACTGGACTT
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCGGTAGG AGTCGGCTTT ATGTGGGAAG AGAGAAAAA ACTTGGTGAA ATGCTTCTG GACTAATTGA AGAAAAATGT
AAACTACTTG AAAAAATTAG CCTTATTCCA AAAGAGTATG AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT
TGAGAAGGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTGAAC TTGAAGATGA
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AAACACTCTC AACAAGATGA ACTGATGGCA GATATTTCAA
AAAGGATACA ATCTCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAAT CATCTNGCA
AGGTTCTTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGTTTGAGAG TAGAACAGGA AGTTGTGAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGCTTCCC CAGGCAGGAC
TCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCAGCACT TTGGGAGTCT
GAGTCGGGTG GNTCACCTGA GGTGAGGAGT TOGAGACCAG CCTGACCAAC AGGGTGAAAT CCTTCTCTA CTAACTACA
AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAAT TGGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTTA
CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGGCAG CCAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGAGT
AAGT

SEQ ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTTCACAG GTTGTGCTT CTGAAATCTG TACCTTCTTA CTCATAACAT TTAATGTAGC ATTTCTCAAC CTGACCAATC
TGCAGAAAAT ATATGTCATA TATTAATTGT GTATACATGA ATATATGCAT TTCTCTGGTA AAAAGTCATA GTTTTNCATA
GATGTCATGT AATCTTTTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTAGA
TGAAAGGGAC CTCAACAAGC CTCTGAGAT ATGAANCATA AAGAGNAAAT ATAAGCCCA ACTTTTGTGAC ATGACAGATT
CATAATGGTT

SEQ ID NO:832: (Length of Sequence = 402 Nucleotides)

CTGTTTCTC CTTTGTTTT CCTATTATN CTCCAGTGC TAACITGATA TCINCTTGTG TGTACACGTG TGTNTGTGTG
CAAATATATT TCTAGGAACA AGAGCAAACA TTCTAGTAAC TATCATTCTC TGAATGGAG AACITGGGCA GAGATCTGAG
TTACAGCTTT GTGGATTAT TCTCTCTGAT GAGAGATCGC CCGTTAGAAT GTCATGGTCC TAACCCCGTC ATGGATACCA
GGGGTGAATG GCAGGGTCT TCTCTGCCC AGGAGGAAGG GTATGGGGAG CCGTGCATC TTGACTGTCA GGTCACTGT
CTTACCACCT TTACAGCTAG GCTTTCTGAG GTGCCAGCT CTCTGGGAA TTCAAACGT AGTTTAGAGG CAAGCTGGGT
GA

SEQ ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTC CAGAGATCAG ACCTCTTAG ACATCTGAGA NTTCATACAG GAGAAAAACC TTATGANTGC AGTGAATGTG
GAAAAGGCTT CTCCAGAAC TCAGACCTCA GTATACATCA GAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA
TGTGGGAAGG CTTTACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGGA GAGAAACCTT ATGATGTCNC
TGACTGTGGG AAGGCTTCA TCCAGAAATC ACATTTCAAC ACACATCAGA GNTTCATAC TGGAGAAAAG CCGTATGANT
GCAGTGACTG TGGGGAATC CTTTCACTAN GNVAGTCACA ANCTCCATG TGCAACAAAG GNTNACANC CCGGGAGG

SEQ ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTTGTGT AGTCTGTAAA ATCATTTCOA GTTAAATCT AGAGCTTAAT CCATATGNG TGCCATCTTT TGCTTTTCCA
CACTCTNAT CTTAGGTAAG TNAGAGCTAA AGATATTTN CTGAGCTTCT ATATGGGCC CAGCATATGT NATAATTCCT
TTTACACATA GGAATCTGAG GCTTAGAGAA GTTTACTGAT TTACCTAATG GCACACATA AGTNGTGGG CTAAGATTTA
AACTCAGGTC TCTGACTTA ATTGAGATGG TCAGCTCGAT GGTAAATCATA ATAATATTGT NGTGTGTGT GTTGTGTGTA
TNIATCAACA ATAGTAGTAG CTAAGTCCAT TTCATGAAAC AGCTCATTGG ATAGTCCCAT NTGGATAATT CTGA

SEQ ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTCTGCC TCTATAGATT TGACTATTCT GGACCTTCA CATAAACGGA ATCATGTAAT ATATATAATA AGCAAAAGST
AACAAACAACC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC
TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATTGT TTCTCTCCC CAGGAGATTC
CAAGGTGCAG CCAAGGTTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAGGGGCAG
GAGGGATGTC TCATTGAAGA TGACTGTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC
CCAATCTTCA ACACAGCGTG GA

SEQ ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGTINAG ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC
AAGGGCAAGA GAAAAATTCC TCCAATTTTA TTGAACGAAG ACCTCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTC
TCCACTTCCA GTTTTCAAG AAGTAAGGTA AATGCAGGAA TGGTAAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT
TCAGATTGCT AATGTTACAA CTTTAGAAAC AGGTGTAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG
ATATGAACCT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GGACTGCAGT
CCAAGTAA

SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TCGCTCTGTT GCCAGGCTG GAGTGCAGTG GCACGATCTC AGCTCACTGC AACCTCTGCC TCCTGGGTTT TAGCGATTTC
CCTGCCTCAN TCTCTCAAGT AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGTAGAGGC
GGGGTTTTGC CATCTGCCT AAGCTGGTCT CGAACTCTG GCATCAAGTG ATCCATCCAC CTTGGTCTTC CAAAGTCTG

245

GGATTACAGA CGTGAGCTAC TTCACCTGGC CTGTGTGGCT CTTTTTCAAA AAAAGTTTAC TNGACTCTTG CTTTATTGCA
AGTCCCAGAA TGGATTGTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTTA TTTTAGCTTT GCATTACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCTTG
TGACAAGCCA AATACTGTGT TTTTGTGTG TGTTGTGTTT CCCTTCACCT TTCATTGTAT GCCCTTCAGA AAAATCTGAG
AAGTGGGCTT CCATTTTGA AAAACAGGAC TTCTTAGTA CCATAGATAC GTAGATTGCA ATTTNCTTT TCCTGCAGCA
TACTGACCT TGTGAAATGA TGCCTATGGA TACGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

TTTTTGTTTT GTGTGTAGAG ACTGGGTTTT NCCATGTC CAGGCTGGTC TTGAACCTCT CGGCTTAAGC NATCCTCTTG
CCTTGACTTC ACAAAGTGCT TGANTACAG GTGTGAGCTA CCACGCCCTGG CCATGTTTTT TGTGTGAAG GATCTGTTTA
GTTTTATATC TTTCTGTGGC TCATATCTAA TTAGTTGAC AGTACCTGTG GGTCACTAGG TAGACATTGC TAGCAGAGCT
TTAGAAATGA AATACTAGAG CTGTGGAAAA AGTTGATATT TGAGATAGAG ACTTGAAGAA CATTAGCAGA GAGTTGGTAG
TTAAGGTCTG TGAGCTGGTG AGCAATTCAA AATAAAAGCA GAAGAGAAGA GGAAGACAAG GGTCAAC

SEQ ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAAATA ATCAGTGAGC CACGGGCTGA ACTTGTGGAA AAGAAATGGA GGGCAAGGTC
ACAAACCACT CCTAAGTGC TTCTAATTTA ATGTAATCCT CACTGTTTGT CATTATTGCT TTINATGGCC ATGAAATCTG
TTTTTCCCA GINCTCTAGT GTAATTTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTTCC TAGAAGAGTC GGGGACATTT
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTTCATGCT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT
CTGTTTCAGAA GTAGTAACTA TGGAGTTTAA CCACTCTGGG ACATAAT

SEQ ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTTT GTATTTGCCA AAACCTTGTC TGTAGCAGTA AGTGTGAAAC
AAGTTTGCTA CATTTTCCTT TTGGTTTTTA CTGGTTGGG GCTTTTTTGT TTGGTTGGTT TTAAAGGATT TAGGGGATTG
GCAAGTCAGT TTGTCAGATG TCAATGAACA GAAAACCTAA GAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT
TTNCTTAAG TAATTTCTTA ATCATTAGTT ACAGCTCTGT GTCAAAAGAT GTACATAGAA ATTTATGCTA GATTCTTAAC
ATCTTTCCTT ACTGTGTGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GTTCTTTGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANTCTCTGGG ACACATTCAA AGCAGTGTGT AGAGGGAAAT
TTATAGCACT AATGCCAC AAGAGAAAGC AGGAAAGATC TAAAATTGAC ACCCTAACAT CGCAATTAAA AGANCTAGAG
ANGCAAGAGC AAAGACATTC AAAAGCTAGC AGAAGGCAAG AAATAACTAA GATCAGAGCA GAACTGAAGG AGATAGAGAC
ACAAAAACC CTTCAAAAAA TCANTGATTC CAGGAGCTGG TTTTGTAAAA GTTCAACAAA ACTGATAGNC CACTAGCAAG
ACTAAT

SEQ ID NO:843: (Length of Sequence = 380 Nucleotides)

GGCCTTCAAA TTACAAAAG CAATTTACAT TATAGTAATA GTTCATGTTT ATAGTACAGG AACAAGAATG AGTTAACTA
AATATCCAA ATCAGTACAA GINATNCTT TTTTTTTTTT TIGAGACAGG GTCTCACTCT GTACCCAGG CTGTCTTGCT
TTGTCAATCA GGCTGCAGTG CAGTGGAGTG GTCACAATC ACTGCAACTT CAGCCTCTTG GGCTCAAGCA AGCCTCCCAC

246

CTCAGTAGCC TCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTGCG CATGCCCAGC CTAGTGGTAT TTTTAACAGA
TAANTAAGAA TGGAGGTAGT GCCAGAGGTG GAGTGAGAG AGAGACANGT AAAATATAGG

SEQ ID NO:844: (Length of Sequence = 257 Nucleotides)

TTTCCCTCTC GTTGGCCAGG CTGGAGTGCA ATGGCGINAT CTTAGCTCAC CACAACCTCT GCCTCCCAGG TTCAAGCAAT
TCTCTGCCT CANNCTCCCG AGTAGCTGGG ATTACAGGCA TGINCCACCA CGCCTGGCTA ATTTTINTATT TAAGTAGAGA
TGGGGTTTCT CCATGTTGTT CAGTCTGGTC TCAAACCTCT GACCTCAGGT GATCTGSCCA CCTCGGCTC CCAAAGTGCT
GGGATTACAG GTGTGAG

SEQ ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CTTGCATTAC CTGGCAGTAA GCTTGGAGAG TAAGTTTTC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC
TTTGCAGATC ACCGCAAGTA TTTGTATTC ACTCTAAAT AAACAGAAAA CCCAGGAAGG GTTTTAGGCA GATAAATGGC
ATTATTTAGT TTTCTATTT AATCATCAT TTAGGTTACT GGGGGAGGCT GCCCTGAAGT GGATCAGAAG TAAAAGGCAG
AGATACCAGC TAGGAAGCTG TTGCAGTGAG CCAGGTGAGA AGAGAGGGCC ACCTGGACCA GGTAGAAGCA GTACAGGTGA
AAAAANTCAG ACACCTCCAA ATCTTCTCA AGATTINATA CATTATTTGG CTGGGCACGG TGGGCTCACA CCCGTAAATC
CCAGCACITT TGGGGAGGCC

SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCCTGGTGA CAGAGTGACC CTGCTCAAA AAAACAGTGA TTGTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC
AATATCTTAA CTTTAAATTT TCAATACTT CAAACTAGT AAGTATTACT ATGCTAAAG CACAGTGAG TCCAACGGAN
TATGTGAGCC ACATATATAA TTTTAACTAG GCCAGTAGTC ACATTAATAA GAAAA

SEQ ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCTTCAT CGCCAAACAG CTTTCAGAGA TAGATGCTTT GTTCCAATC GAGCATGCTA TTCCAGTGTA
CTGNACATAC TGTACCTC GTGTAGGCA CTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTTAAGCATT
TTTAATAGCT TCATGTACAG CATGCTGCTT GGTGNACAA CATTAAATTCT NCGATATTTT GTTAGCTTGA NTGTAACCGN
TTAAGAAAG GTTCTCAAT GGTTG

SEQ ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCCTGGTGC CCTTTTAAA AATTACTTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTA TTCCAGCACT TTGGGAGGCT
GAGGTTGGAG GNTCACCTGA GNCGGGAGA TTGAGATCAG CCTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAATAC
AAAAATTAGC CGGGGCTNGT GGCACATGNC TGTAAATCCAG CTACTCGGCT GGCTGAAACA GAAACCAACA ACGNCTGACC
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

SEQ ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAAATTTNC TAGTGAGGAG TGGAGGAAGG GGGCTGGTG GAGGAGTAGC AGCCTTINCA AAGGCCCTGA GGCAGGAATA
CCTGGGAAGT GGGGGCTGC TTGNTAGA TGAGGCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGGAGCCAC
TGAGTGTAA AATTAAAAGC AGTGGGGCT GGGCACAGTG GCTTACACCT ATAATCCAG TACTTTGGGA GCGCAAGGTG
GNTGNTCAC CTGAGGTCAA NGAGTTNAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEQ ID NO:850: (Length of Sequence = 320 Nucleotides)

247

ATGTCGCGCA ACTCAGGAGC AGGGCAGGAA TCAAACCTTTT TGGAGTTGCT ATCAAGTINCT TGATTTTNCA ATCCCAACCG
 TCCGCAGAAC ACTAGATGTG TGNATGINTG CTGTGTGTG CATTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG
 NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTAAATCT
 GGTTTCCTAA AACCCCTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEQ ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTNNNTTAA ATAAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNTAA
 CCCCAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA
 ACAGTTGTAA

SEQ ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGTACAC ANGTTATTT ATTACATTTT GCAAGCACTC TGTCTACAT TTCAAAAACG CCACNTCAA GCTGTGGCA
 CATTATGTA CAAAACAGAT TAATTGTAAT GCCTGCTACA AAGCACTCTG TGAAAATACA AACTCTAATA CCAGAAATAA
 AAGCCAAAAG TGTCAACATC ATTACATAAG TNGAAAAGTC AGTTTNGAA ATTATCACA ACTGTTATGN CACGGAAGTG
 AAATACTATA ATATAG

SEQ ID NO:853: (Length of Sequence = 281 Nucleotides)

GTATGNGTT TCTCTCTCT TGTCTCTCT AGGATATTIN ATCCTTGACT TTAGGGAGTT TGATTATNAA ATGCCTTGAG
 GTGATATTT TNGGGTAAA TCGGCTGGN GTTCTCTAAC ATTCTTATAC TTAGATATTG ATATCTCCTT CTAGGTTTG
 GAAGATCTCC GTTGTATTTC TTTTGAATAA GCTTCTTACC CCATCTCTTT CTTTATCTCC TCTTTACAGC AAATAAAGTT
 TTAGANTGC CATTNNAGG CTATTTCTTA GACCTGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACCAN GTAATGGAGG TCTATGCCGT ATGAAGAACA CCTGTAAAAG CTGGAAAATG
 TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCCAGAAG
 AAACANATA AGNTCCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT
 TTAATGAATG ATTAG

SEQ ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCCA CCAGAGTGAG CATGCTINCT TCINAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA
 GGACAGAGGC TTCCGTTGTG TCTCTCTAAT TCATTGTTTC TTA AAAAGGA TTTGGGCTTA CAAGTTTCAA ATACTAAGAT
 TINATAAAGT CACATGGATT TTA AAAAATC ACTCTATTGT ATGTTTGAAA CATTCCATAA TTAAATAAAA AGGATTGGTA
 TTATATATGT NCTTGAGTTG CTATAATGTT TTACGGTTTT CCTTGCTTC ACTTTTGAAT TNINCGAGGA TCTCCTGGGG
 GAAGNTTCAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTNAGACAA AGTCTTGCTC TGTACCCAG GCTGGAGTGC AGTGGCGCAA TCTCGACTCA CTGCAACCTC CACCTNCTGG
 GTTCAAGCNA TTCTCCTGCC TCANCCACCC AAGTAGCTGG GACTACAGGC ACGTGGCACC ATGCCTGACT AATTTTTTGT
 ATTTTTTTTA GTAAAGACGG GGTTTCACCG TGTTAGCCAG GATGGTCTCG ATCTCCTGAC CTCATGATCT

SEQ ID NO:857: (Length of Sequence = 334 Nucleotides)

248

AAAAACAATT AGTAAAAATT ATGCATTAAAG GAATTATTTA CTAGACTTTT TGGAAAGTAAA AAATAAGTCA GCTGGTTTTTC
 CCTTTGANTT CCTATATATT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTTGAAATGA
 TTTATATACT GCATTGACCT GGCATGTTAA TATTNCCCTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT
 TTAAACCCAT TCTTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTTGGGTTTC TGATCTTGCC ATAGCCATGT
 AGCACAGCCA CTGA

SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTTG ATGGGTGCAG CAAACCACCA TGGCACGTGT ATACCTATGT AACAAACCTG
 CACGCTCTGC ACATGTATCC CAGAACTTAA AGCATAATTA TAAAAAANTA AGAAAATGGA AATTGATTTT AAAAATTTTT
 ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGGT
 TTAATATCCA GAAAAATATA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

SEQ ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCTCACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCCT TACATTTCCC TTATAATAAT CACTTCCCTG
 CCAAGATCTC TGTCAAGGTT TGAGAAGTCA GAGCATTAAG TTATTNCAA TAAATGGTAT GTACATGANC ATCAGCAAGC
 TCCAAGAAAT GACTCGAGGG CCTTTNACTA CTCAGAGAAT AAAGCAAAAA TGCCAGGTTT TCAGTGCTTG TCTTTTGTC
 CAGGGATTTG GACGTGTTTT TTGTTAAGTN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTCCAGA AATTAATTGT
 AGTGCTTGAA GG

SEQ ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACGNTATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTACATTG ATGTCATCAN TATTACAAAA
 AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TTCTTTCTTT
 CCACTGCCAG GTTATCGTCC CGGGAAGCCC CCCACCCCTT CGCT TCCTC CTCGCGTTTC CCTAAAAAAA NNG

SEQ ID NO:861: (Length of Sequence = 327 Nucleotides)

GGGCAGGTGT CAGCGCCCGT TTCACCGCCA CGTCGCGGAC ATGGTGATTT CAGAAAGTAT GGATATACTC TTCAGAATAA
 GAGGAGGCCT TGATTGGCT TTTCAGCTAG CTACTCCTAA TGAAATTTIN CTCAGAAGG CACTGAAACA TGTNTTGAST
 GACCTGTCAA CTAAGCTGTC TTCAAACGCC CTGTGTGTTCA GAATTTNCCA CAGTTCAGTG TATATATGGC CTAGCAGTGA
 CATAAACACC ATTCTGGAG AACTGACTGA TGCTTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATTT GAGCCAGAAG
 AAGATAT

SEQ ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTGTTGT CTTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCACTCT CTGCGGGGAA AGGACGGCAT
 TGGGGCCCGAG GGTGGAAAAG GGTCTCTGGG CTTCACTGTA AGGGCAAAC TCCCACTGTA GGAGTCCGTC CAGGACAGGC
 AGGCAAAATNC TCTCGGGGTA TGGAGATAGG TCCAACCTGCC CCGAGATGTT GGGAGTGTGA ACCAAGGTGT TTTCCCGAG
 CATCTCCAAG CAGTCCACAC ACCACTCCAC TTTTGTGCAG CTCACCCCTT GGGTCTGTT CTTNCTCCTT TTCATAAGTT
 AGTGGTGCCT GCTTTCCGCT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GGTTTTATTT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTTTAAA
 TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAG GAAGACATT TTTCATACC AACCTTTCCC TAGTTCCGAG
 TTTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTTAGGACG AAGTAACACA ACTTTTATAA

249

TTAACCACTG AAGTNGTCTT TAAGGACAAA ACTTAAATTT TAAAATGGGT GTTACCATAT TTATGAGTG GACTGACTCC
AAGGTTGCCT TGCTCCAAGN NTGGGCATCG TGACATTGCC GTGATGCCCA GAGG

SEQ ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGTNT CTGAGATTG TCATCCGCTG AGGGTAGAGC TGAGGGTGGA AGGGGAGTNA
GCAGACACTC GGAAGGTGTC TINAGGCTCA GGGAGTTATC AATTATAGAA TGTTGTTGAG TTGGAGGAGG TGGCTGGTGG
CCCATCTGT TTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEQ ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCGGGA GGCAGAGGT GCACTGAGCA GAGATCACAC CACTGCACTC CAGCCTGGGC AACANAGCAA GACTCCGTCT
CANAATTTTN CCAAATCTG ACGGAAAGAA AAGAAACAAA TGGTTCAGAT GGGACGGAGG GTGGGGGAGG GGGGGAGGTT
GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TAAAAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCCC CAGGCCACTG AGCCCCGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC
AGACTTCAAG CAGTTTACAA ACGAACTCA CTGTTAAAG CTGTTAAAT TCATTAAAC AGTAGACGAG TGCTTTAGAT
TCTCTGAATA TCAAATAATA TATACAGATA GACACTGAGA CATGACAGTC TAATCTAAG CATCTTTACA GATGCATTIN
CTTGAAGAGT TAGTCTTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCAAGA
NTAGAGTG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GTTCATGGC ATGTAATAAT TATGTGAAT TCAAATTTA GTGTCCCGAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC
ATGINTGCC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCACGGG GCCTAAATA
TTCTCTATCA GACCCCTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCGGCCAGG
AGTGACATCA AGGGTTTGAA GCAGACCTC TGTCCAGGAG GGAGCGGAGG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC
TGTTGGTACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEQ ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCCTTGGN TCCTTGCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGGNTCC TCCAGCCCCA GTAAAGTGTT
CAATGACAG CAGCCCTGGC TAACATATTG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAATCAG CTAACCTGCT
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTTGTTTTAA GCTGCTAAGN TCTGGAATAA TTTGTATTTC
AGCAGTAGNA TAACTAATAC AANGCCACCC AAGNATCAIT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCTC CTGTGAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT
GAACCTGTG CATGCGAGGG ATGTGGGTG CACTCTCCTT ATGAGAATCT AATGCCGTGAT GATCTGAGGT GGAACAGTTT
CATCTGAAG CCATCCCTGT GCCCTACCT GTGGAAAAAT TGTATTCCAT GAAACCAATT TTTGGGGCCA AAAAGATTGA
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGGTA TAAAGTCTTT ATCTTACTTA TATTTATATC CTCTATGGTG
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTTAACT AAAATATTNC TTTAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

250

CAGCTTTGCA AATCAAATAG AATTCATTTT GCCTCCNCTN ATCTTACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC
 TTCAAGAGAA GAGGCGTTC TGAGAGCCTC CTTCGGTGAC TTGCACACCT GGGGGCCAGA TGINCTTTGC CCTCCTTGCA
 AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTTGCTTTTN AGTTTAGATG AGAAAAACA
 GCAAAATAGT CCATCAAGGA CAAATTCTTG CCAATGGATT TNCITTTGCA AGGANGTCA CCTTTGNCC TCAAGCATCA
 TCTTTAAGTT GTGAATGCCT GATGGGAGGT CCAGGTTGN CTGTGGGAGG AGCTNGGGT GGNITCCAAA ACCACCTGGG
 GACCAGTGG

SEQ ID NO:871: (Length of Sequence = 290 Nucleotides)

TCTTTGCATT GATAGATTAG TTATTTATGC CAGINGTCTC TGCTGGCTT GTTTTGGTTT TNATTGCATT TGTTCCTAG
 AGATTCGTTT TAGTTTTNCA ATTTCTTTCT CTGTACACCT GCCCTCCCC CACCCACCA CTGGGTACT ACCTCCTTTT
 TGGCACTACA TGATGCCTTA AGCCAGGNT TGCTAAGCT TTCATAACAG ATCCAGCAC TGCTCATCCC CAGTGGTGA
 GGTNCTAAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGTGT

SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTCC CTTAAGGAAA GCCCTTCTG
 CAGATTCCCA CAGAACTCGG CCCAGGCACT TAACCTCAT CTCAGCTCTG GTACAGCTCA CTGGGTACAG TGTGTACCA
 ACTCTTATGC CTGGNCTGCT GATAAATCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG
 TGCTTGTAAT TGTGTAAAA TATAGANGTA ACATACAGCA TGTGTCTACA CGNTTAATAA ACTGGTGCTA ATT

SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

TAGTAAACAA GTATTACTTC AACTGATACA ATGGCTACAT GACATCAAAG TACTATAAAT NATCAAACT ATCGTTCAGA
 AAAATTACAA ATTCGTTGCA AAATACATTA TACTGCTACC ATTAAGAAA AAGTGCITTT NGTTTTCTCT TCTTTCTTTT
 TTTTPTTTTT TTTTGCCAGA AAAGTATCT TNCATATAG AAAATCTAC ATGTTACCT GCATGTGGCT AGGNTATATC
 ATAACGGAGT TTGTACTGAG TCCTTCTGAT TTGCTGSATG AAGGGCTGAA AAATATATTA

SEQ ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TGCTGAGAGA TTGTNAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA
 TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAACTGTT
 TTGTGATAAG TGAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAGAN GAAGGACTTG CCTGANTGAC
 TTGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCITT CTGTTAAGCT GCTGCATTGT TCCTGGAGGA AATGTTATTT
 CTAATGCATG TTATTCTTC AAAAGATAGG ATAACAAAGA ATTG

SEQ ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TGCAGATTAG TATCATTTC CTCATAAAG AGAGTATAAA GGTTCITGAA GTTTTIGAAA GGAGCGGCTN
 AGCTGACTGT TAAGGAAGCT ATCTTTTGT TACAAGAAAT TTACTTTTT CCTTCTAAA TTTCACAAAC AGAATATTAT
 TAGAGACAAC AGAATACATT TACAAAAATG GCATCAGAAA TAATTGANTA CATTGTGTAC AATATCTNCT ATTAATGAAA
 TAAATGATA TTINATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TTNCCAATAT TCTAAGGNTG ANCAAAGNG
 GTTTACAAAT AGCATGCAAG G

SEQ ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTCANCTT GTGGGTCAAC TTCTAATATT TGATGGTG3C TACACTGTGA CAAGAAAGGT TTTINAGCTT GTTGGGGTCA
 GTGGATGGGC ACAAGGGCAC CCAGTGGTGG TGCCCGNCC AGGGAGGAGA ATACATTGTA GAATATAAGG TTTGGAAGTC
 AAATTATAGT AGAATGTGTA TCTAAATAGT GACTGCTTTG CCATTCATT CAAACCTGAC AAGTCTATCT CTAAGAGCCG

251

CCAGATTTC ATGTGTGCAG TATTATAAGT TATCATGGAA CTATATGGTG GACGCAGACC TTGAGAACAA CCTAAATTAT
GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTITGGCTCC TGAATGTTGC AGAAAACCTGG TTTTGTACAC TGGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGTTCCTCA
GTCAGCTCCG TCTTGGTGT CGCTTTCTTG CAATTTTTTT CCTCCCCCTG CCCTTCTGT GAGGGTTAAA AGGGCCATCT
CCAAGCCAGG TGGAGCCCCA ATCCCATTTGA CCAAGAGGSC AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCCTCTAA
AGGAGCCCCA AGGGGACACC TGCAGAGGGC GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT
CCAAATTTAG TTGAACCAAG ATGTGGTATA CACTACAAA TGCAGATTCT GGTGCCCTC TCCAAGAGTC GGCCTCAGTT
AAAA

SEQ ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCGCTG TGCTGTGGC ACGAACACCT TCAGGGACTG GAGCTGCTTT TATCCTTGA AGAGTATTCC CAGTTGAAGC
TGAAAAGTAC AGCAGAGTGC AGCTTTGGTT CATATTCAGT CATCTCAGGA GAACCTCAGA AGAGCTTGAG TAGGCCAAAT
NITGAAGTTA AGTTTTCCAA TAATGTGACT TCTTAAAGT TTTATTAAG GGGAGGGCA AATATTGGCA ATTAGTTGGC
AGTGGCCTGT TACGGTTGGG ATTGGTGGG TGGGTTAGG TAATGTGTTA GTTTATGNTT NGCAGATAAA CTCATGCCAG
AGAACITTA AGTCTTAGGA

SEQ ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG
CTTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAGCCAG TATTCTGTCA CAGGGACATT TGTCTTNTC
CTTTAATGCC CAGTAAGGGT CTTCTCAGGT TCCATTAAAC ATGCAGAATC ACAAGACCC CCCAAAGTTA CCATGGTGCC
AACCAGTCA AAACAATACA GACAAGAAGC TCAGTCTATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGTCC ATATCCACGG GG

SEQ ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTG TGTGAGGCC CAGGAGTTTA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAAGTG
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTIN CTGAATTTCA GAGCTTAAAT ATTATACTTC
AACATGAGTC ACACCTTTAT TTATATGTG GTTTGTCTCA GCTGTGTGT GGGTTGGTGG AAGGAGACCA CACATACATA
CACACAGAGT ACATACATGC TGTGTATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA
ACAAAGACTA GAGAGGCCTT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

GTCTTTNCAG TCAAAGTCC TTGAAGCTGG GACCCTTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTMTG
ACCGTTTCAA AAAAGGAAGA AAAAACCCT TAAATCATTT TTCTTTCTC TTTTCTACTG CAAAGGCCGA CGAGATTGAA
ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGGCAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGAACAGCT
CTCATCGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG
ACCCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

252

TGCCATTAGC AACACTGTTC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT
 CTTTCCGAAG TTATAATAAT AATTGTGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT AACTATATACC
 AACTTTTACC CAATTTGGAA TGAAAAATA CATTTCCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTTCCTTTTG
 TGGGAAAGAA CCAGAAATTC TTTGTCATAT GTACCCATTT ATCTTATTIN AGTTACCCAA CCAAAGATA AAATAATATT
 CTCAAAGAGA TAATTGACTG GAGGAGTTTA AAGTGTATTAT AAATATTAG

SEQ ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGAGT CCAGACGAG CCCTTTGTCA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT
 GTGATCACAA GGCATTGTCT GTGGGATTTT NCCTTTCCCT TTCTTGATCT CTCTTGTTGT TCTAGGTTGT TTGGTTGTTC
 ATTGTTATGG TGCTTTTINA TTTTAACGCC CCTTGAGCCC CATGATGGCT GGTGTCACCC GTTCCCTTTA CACTGTTGGG
 CCAGGTGCTG CTGTCCCTTC TTAGGGCATC ATCAATTCGA AATATTTCCCT TTGCTCCCT TTATGAAGAT GTTCTTATAC
 CCTTGCTTTT CCATATTTT TNIGGGCCAA GCAATGCCAT CTNCTTTTA

SEQ ID NO:884: (Length of Sequence = 327 Nucleotides)

AGTTCATCTT TTTCCAGAGG GGTCTGGGTG CCTTTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG
 CTGAACCTTG ATTCAAGACT CTGAGGCACC GGGATGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG
 ATACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAAGGCTG TGGGGGCACA GGGGCATAGC
 CAGGAGGAGG CTGACAGGGT GGGGGCCCGA GAGTGCCCTG GGAGGGAAAC AAATTCCTGA GCACAGCTTC AAATGGCAAA
 GTGGGCT

SEQ ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAAGCTT ATCCACCATG ATCAAGTGGG CTTCACTCCCT GGGATGCAAG GCTGGTTCAA TATATGCAA TCAATAAATG
 TAATCCAGCA TATAACAGA ACCAAGACA AAAACCAT GATTATCTCA CTAGATGCAG AAAAGGCTT TGACAAAATT
 CAACAACCTT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAA ATAATAAGAN CTATCTATGA
 CAAACCCACA GCCAATATCA TACTGAATGG GCAAAAACG GAAGCATTCC CTTTGAAAAC TGGCACAAGG ACAGGGATGC
 CCTCTCTCAC CACTCCTATT CAACATAGGT GTTTGGGAAG TTCTGGGCCA GGGGCAATTT

SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTACTCCAGA AGTCCTTCCT GGGTGGAAG GAATGAGTGT TTCANACTTA
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTGTATT GATCAGCTGA ACAGAGAGCT
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCAGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG
 ACTCTGCAGT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA
 GATGCCATGG GAAAATGGAA ATGAGGAACC CAGCTTCGCC GACAGTAGGC TTGCCACAC TGATTCACTT TCGGAGATGT

SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAAATAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAAGTGG ATAATAAGTA AAGGCTGAAA GAGTACTGAT
 ATACATGCTA AATAAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTTAGACAG GACATAGAGA
 CCTGGAGAAG AAGTCCCAT TTTCTAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG
 TCAATGTAAT GAAGTCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGGG AGAAAAGGTA ATCTTGTTA TAAAGTGGCA
 AAGGAAGTTG GCCTGAATTG TATTCATGTN CTAGTGCTTT CCT

SEQ ID NO:888: (Length of Sequence = 318 Nucleotides)

253

ATCTTGCATG ATTAATACTA TTGGCCTGTN CCCTTTATCC TCAGCTGGTT GTACAATTCT TGAATGCTTT CTCTTCCCC
 TGAGGATGCT ATAGATATTG TCCCTACTGTN ATCTGAAATN AGTCGTTTIG GAGAAGTTTC TCCATCCAGA TACCTATAGA
 GTCGTCTTT TTTTTTTTTT TTTTTTTTTT ATATGCAAAC NCTCGCTGTA TTATTCAGGC TGATCTGAAT CTCCTGGNCT
 TTAGTGTGT GACAGCTTIG GCCTCTTAA ACTGCAGNT TACAGGCATG AGCCACAGTG CCTGGCCATC AAGTAGCA

SEQ ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCT ACGTAGACTT CTNCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGGCGAC CACAGCAAGG
 AACTGTAAACGCCAACAGTC CTCAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA
 ATTAATAATGA CCATGGCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAACC ACCTTTGCTG GAAAAAATGT TTGGTAGTTT
 AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC
 TAAGGTTTAT AACCAGCATA TTTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGTAGGGG TTCTAGGTGA GGGCTAGTAG GTAGGGTTAG TAGGTAGGGC TAGTAGGTAG GGCTAGTAGG TAGGGTTCTG
 AGGTAGGGTT CGTAGGTAGG GTTAGTAGGT AGGGTTCGTA GGTAGGGTTA GTAGGTAGG TTCGTAGGTA GGGCTAGTAG
 GTAGGGCTAG TAGGTAGGGC TAGTAGGTAG GTTAGTAGT TAGNGCTAGT AGGTAGGGCT AGTAGGTAGG GCTAGTAGGT
 AGGGTTCGTA GGTAGNGTTC GTAGGTAGGG TTAGTAGGCGC GTCNTCTT CTCCACCT GGNCTTGT AAAACNTAT
 TTTACAAGCA ATAGGAATTT G

SEQ ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA CCGNTGGAG CAGATGCGG CCATTGCCCA GGAGCTCAAC GAGCTGGATT ACTACGACTC
 CCACATGTC AACACCCGGT GCCAGAAGAT CTGTGACCAG TGGGACGCC TCGGCTCTCT GACACATAGT CGCAGGGAAG
 CCTTGAGAA AACAGAGAAG CAGCTGGAGG CCATCGACCA GCTGCACCTG GAATACGCCA AGCGCGGGC CCCCTTCAAC
 AACTGGATGG AGAGCGCCAT NGAGGACCTC CAGGACATGT TCATGTCCA TACCATCGAG GAGATTGAGG GCCTGATTCT
 CAGCCCATGA CCAGTTCAAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCCTGCCTGT AATCCAGCT
 ACTCGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTGTCAGT GAGCCAAGAT AAAAAGAGTG
 AGACTCCGTC AAAAAAAAAA AAAAAAATA TATATATATA TATATATATA TATATTNGN CTCCAATCCC ATCTAGGTTG
 CTGCAATGC CATTAATTTA TTCTCTTTA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTTGT
 TGATTGATGG GCGTTTGGG TGGTTCCACA TTGTTGCCAG TTGCAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TATTCCAAGT TAGTTATTTT ATGCAGTAGT TTCCCTCTG AGACTTGTGA TAACCACATC TTTTAAATCT
 GTAAATAATG TTATCAAAAT AATCTTAATC TTTGAAATCT CACAAAAAT TATATTTTAC AATCCACCT GAATATCAAG
 GCTGCAAGAN TAACACAACA TTCTTATAT CCAAATATTT TACAGCTGTA CCCAAAAAGG

SEQ ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTTGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AAATAATAT CAATGTTTAA CAGGGTTGAC
 TGTCATTAAT GATGTGCTA GCTGTGGGTA CAGATGCTTT GCACATTACT ACCCTCTATT CTCACAATCT TCCATGGGGG

254

ATGTATTAGA ATCCCTTTT ATAAAGGATA AAGGTGAGG TCAGAGAGAC TAGGAAGCCT GTNCAGGGTG ACACAATACA
AAGTGCATA AATTGGGTTT GTACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

SEQ ID NO:895: (Length of Sequence = 304 Nucleotides)

GGTCTAGATT CAGTTATGAA TGTAGGCATT AGTTAAAATT AACAGATGC AGAGTATTAA TTCTTAAAGA CAACAAGTG
ATTTCTGTAA GTTTGAGCCC TATGIGGAAA GCATTGTGGA ATCTTAACCT TTTGTACAC ACTCTGTGG GACGTATCAT
ATAAATGTCA GCACTAAGTA ATGCTTGT TGTGGCTGAA TATTTTNCGT AGATGTTTTT GAAGTTGACA TGAATTACGT
GCATTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTINGGA ATATGGGTTG TGGG

SEQ ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAAGTATT TCATCATATG CATGTACTGT ACCTTATTTA GCCAGCCCCA TTTTGTGTTGG CTTGTGGAGA ATTACAATAG
CTGTTTTGAC TGTGTATCA CATGCCAGGC ACTGTACTGT GTATTATCTC ATGTAATTCT CATAGTTACT GCATGGTGTA
GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AAAGTGAACC CAGAGATGTT AAATAATTG CCCAAGTTTT TTGGCTGATT
ATACTGATGA AGATACTGAT ACTAGCATTC TGTGTGTCAGT TATTTGCCAG ACAGAACTCT TTATTTTTTA ATACATATA
TCCATTTACT CTTGAGG

SEQ ID NO:897: (Length of Sequence = 316 Nucleotides)

NATCACCTNA GGTGAGGAGT TCNAAACCAG CCTGGCCAAC ATGGCAAAC CCCGTTCTA CTAAAAATAC AAAANTNAGC
CAGGTGTGET GGTATGTGCC TGTAAATCCA GCTACTCAGG AGGCTGAGGC AGGAGANTCA CTTGAACAGG GAGGTGGAGS
TCGCACTGAG CCGAGGTTC AGTGAGCGA GATTGCACCA CTGCACTCCA GCGTGGGCGA CTNAGCGAGA CCTGCGCTCA
AATAAAGAAA TAAATAANTA AAGTGGGGAA GTTAGTGGTT TCTGGTGTAT TCAGAGTTGT GTACCCATCA CCTGG

SEQ ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGGTAT GGATGATGGG GGAAGGGCG GTGCGCTCTG CCACTGTCTAG GGACCAGCCG GCCAAGGCCC
ACCCGNAAG GTGTCTAAAA ANTNAGCTT TTCACCCACC TGCCCTTTTC TTTCAATCCC ACGCTGTTTC CTTTCAAAGT
TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

SEQ ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAAGT TAGCGGTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCTNIN AACATNAGTG
TGTGGTGCTT CCCAGGAGCA GGGATTNAG CNAGGCTGCT GACACATAAA CACACCCCA CCTCCAGAAG CAGAGGAGAG
GAGCCAGGG CCGGGCAGG TAGCTCAGCA AGGACCCAGC ATGCTNCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA
GGTTCAGAGA GGAGAGAGGC AAGA

SEQ ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACCAG TCAGCAGAAG AAATTAGAGG AGAGACCACT TAATAAATGT AGTGATCAA TAAAGCTAAA
AAATACCACT GACAAAAAGA ATAATGAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATT CAAATAAATG
GAAAAGATAA TAAACCNAA ATATATTGA NAGGTGAATG CTTGAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGTAAT
GTTGAACCA AGGTTAATAA TATAA

SEQ ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTC AATGTGTGG TCAAAGTGGC
GATACAGCAA GGTGTGACG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATTT TNGGTTCTCC TATCTTGATG

255

CCAGGATGCT GTGTGTAGGC GTGGGAATNT GTGCTTGGGG CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTTGTAGAA
GACTTCACAG TGAGAACCCTT GAATNTAAGA CTTACAGACA GCCACATCAG AGTACACAAC CATTGCAAAT GCACCACATC
GAAAACCAAC TCTCCTCGTG TAGTNCAGAC AGTTCTTTGT GGCCTGGGGT CTNGGAAGGT G

SEQ ID NO:902: (Length of Sequence = 331 Nucleotides)

GGTGGCCAGT GATCTCCTTT CTTATCACCT ATAGACAGCT TGCCCTACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGT
ATGAGATACA ATGAGCGCCC TTGGGCCATT AAAATATGAT TGTNIGCCCA AGGTGCGCTG GNTGCAAAC AGCTCTCCAG
AACCTGCAGC CAGCACAGAC CAAAGTCAGG TTTGINTCCT CTCTGTGTGA TGAACAAAGG TTGATTCCAT ATCGTGGCTA
TTGTGAATAG TGGCAGTAAA CATGGCAGTA TTGTATGAAA ATATNACAGA TTAGNCCCTT TAAATATGTG CACTATGENT
GATCTATCAA A

SEQ ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA
AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA
ACATTTACCA AGCAAATAGA NAACAACAAA AAATATTTCT AATAGATTTT TGCTTTTAAT AATGAAATAT GTCAAACCTC
TATAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCAATGTA TGGNTAATAG TAACTGAATA GCTAGTATTG
AATAACCAAG CTTCCTTTTG TTGTTTIGNA CATTGGNGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA CCGGTAGAT AGATGATGGG CTAGGCAGGT GGGGGAAGAC AGAGCTCACT GCCCTNIGGG GTCTCTGTGG
GGCCAGCCCC TATGCCCCAT GTGGCCACTN ATGCCAGCT TCCCCAACA CCCCANCACA GGCCAGGTC AATATTACAA
AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCCCAGCCAG CAGGGGTAGG GGAGGNCGGT
TGAAAGTGNC ACTCCGGTTA AAAAGGCAAC AACTTTTATA AAATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAAA GTTGAACCTT TTAAAGTGCT GAACACAAAT CCAAATTCGA ATGGTCAAG CAGCCGTGAA ATCGCTCTTC
ATAAAGTGGG CTTAATCTTC TAGTTAAGT TCTTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTGTGGAT
GCCATGATTG ATGATGTTCA TTTTAAGCTC TTACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGGA
AACTGTGAGC TGGGTGTGTG CATTAAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG
TCTTTCTTC CCCAGTGGTA AGGCAAAATC CTGGCCTANC TAACCAACAC CCAC

SEQ ID NO:906: (Length of Sequence = 375 Nucleotides)

CTGACTGAAA GGCTCTTCC AGCTCCAACA CATGAAGGT CCAATATTTT CCCCAAATGT CTGCGCTCT GAAAACTTCA
ACTATCTTAA TATTGTGAC ATTTATGCCT GTGTATGGCA ATCTGATGGT AAAAGGAGCC ATATGTAAAT AATAACTGAA
ACTTTGTCAA AATAATGTTA AGGAAACATA ATTAGCAAG CAATATATAA TINCAAGTCC ACTGATTTAG AGAATCAGAA
GTACANTTA GAATCAGAAA TAACAACAT CTGGCAGGGA TGGAAAAATG AGAGCAGATA TAAAGGTGT ACCCCAACCC
CTGACCCAC TGCCATTG GTGTGCACT ATGINTTCC AATATTAATA TCTTT

SEQ ID NO:907: (Length of Sequence = 390 Nucleotides)

GTGCTGACTT CAGCAGCCCT CTGAAAGGCC CCTTCCATAA GCTGGGAAAG TATGATCATG GTTCATCAT CTTGTGTGGT
TATTACTTCA AGGTGACCA ATCTGAAAG TCTGTGTGAA GAAGGGGACT GAGTGGCTGT GAATGATGAG ACCGTGTGTT
AAAAGCCAGG CTTAGCCTGA GGTCCGGAAG AAGCAACCTC AATGCTGTGC TTTACCATAG CACCACCTGC AGTATCCAG

256

GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC
TCACTAGTGG GGAAACAAT TTTACCCCC TGTATTTAAA TATGGGGATT TCAAGGC AAAAGCATT

SEQ ID NO:908: (Length of Sequence = 207 Nucleotides)

CTTGCATACA GGTGGTAAGT TATTACATTA TTCTNCCTC CTGTCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA
CTTCCCAAAG GGCTTGCCCG CAGGTNAGA GGTGCACATT GAATCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA
GAGAGCTTCA GGGNCCING GNTTATNACA TCGCTGGGCC AGGANAT

SEQ ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CTGATATAAT ATCTATAAAT TTTGATTCCT TGGGGTATAA CAAGTAAATA ATTTTAAAT GGTGCTTAGC
AAGATTGGTT CATGNAAT GAAGCAATTA TGGCTTGANT TTATATGTAC AATATTTATT GTCTTAATTT TAATTTAAAA
CGAATGACAT GTCTTTTTT TAAAAAAG TCTCTTTTA AAGATCTTGT AGTTGATGTG ATGAGCTATG CACTGCTAAA
TATTTATCCA CACATAAATA TTTGANAAGG AATATGGNAT AGTCATGGGA TGTAGTTTCA TCTCAGTGCT CCATGGAGGG
AGTGTITTTCA CCTCCTCT

SEQ ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCCTAT CTACCATCCA CTACCCANTN ACCACCCACC ATGACCCACC ATTTGCCATC TACCCATCCA
TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGNAAAA
AAGACAGACA ACCCCGACC CTCCATCCT CAGGGAGCTC TATTCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT
CATCAGTGCT TGCTGCCCGT GTAAAGTGA GGTTCOCAGG CCGAGGACC AGNCTGGGC AGGGCTTCCC AGGGGTCTNC
T...GGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACTG GG

SEQ ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACTTCAAA AAAAAA AAAAGAGAGTC ATAATAAATA TTINACTGTC TAGTCAACCT AATTATGAA GCTGATTAT
CTAGCTNAGC CTCCGAGAT TGCTACCGGA AATCTCCCA GATGTTCCC CTCTAACCT AACTNTCCAC TGNTGGCAG
GAAGGCAGCC GGCATCTGC ATTCOGGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CCTGCACGTN ACTCAACAGC
CCTGCCTGCT AACCAGTTAA CCAGTTCTCA GTTGGGTCA CGGACCATG AGGACCCAG CTCTCTTCCC CTCAGGTGA
TATTGTGCTC CAAGCTNGG GATGCCCCG GGGACTATGT GGAGGGAGAG TTCCTTA

SEQ ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGTA TTNCCTATT TATAATAAAC TACAGAAGGT AGATTTCAA GGTAAATGGCT
GTATGGAAA CCTACTGAG GTGTCTGCT AAAACCACT CAGTGTGCAA AGCGAAATAC ATTTNCTACT TCAATAGCTC
CTCATACTGC ATCTGTCTGT AGAGTTTATT TCAGTAAAC GTTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTATATATCC TACATATGGC TATAAAAATA AATTATAAT TTTAAAATT
GTTTAAATA AACATTTATT TTTACCTTA CCAAAGTAAA GGTATACAG

SEQ ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAAGC GTGCNNTCG CTGGTCTTN CTTCCTCTA TAAGGTGGTG CAGGTNTTT
CCGAGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGA CAACTTNTT ATCATCTAG AGCTGCTGGA CGAGCTCATG
GACTTCGGCT ACCCCAGAC CACCGACAGC AAGATCTGC AGGAGTACAT CACTCAGGAA GGCCACAAGC TGGAAACAGG
GGCCCCGGG CCACCAGCCA CCGINACCA CGGGTGTCC TGGNGTNGG AAGGCATCAA GTATCGGAAG AAT

SEQ ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGCGC CTGCCACCAT GCCCGGCTAA TTITNAGTAG AGATGAGGTT TCACCATGTT GGCCAGGCTG GTCTCAAACCT
 CCTGACCTCT GGTGATCTGC CCACCTCAGC CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CGACCGTGCC TGGCCTTCTC
 CACTGTTTTT ATAGTGAAGA AAGGACACCC AAATTTTGAT CTGGTTCAGC TATTCACTAT TCIATCCTGT GTGGTCTTAA
 GCAAGTTACA TAACTTGCTT ATATCTCAGT TTACTTAGCT ATAATAATAA TTAAATGGT CAAATGTTCT CTAAAGTCTT
 ACTAGTTACC AGTGTTCAT GGGCCCAACA GCATCTACAT TACCTGAGGA GGCTGGTAGG AAATGCAGG

SEQ ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TTTTINATTAG ATGGAAGATA ACAAGCAITA CCNCATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG
 CCACAGAGGA GTGAGGACAT TACTGGCTAT GGAATGGGT ACTTATGAAA TCTAAGGGTT GGTCTCTCTG ATGAACCTTA
 ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT
 TGGCCAACAG TTCCTCCAGT TCTGGTCGAG CTTTGAATCG TCCCTTTGAA GTCTTCTTTC AGNIGGTGCT CCTTCAACTT
 GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTTCAAG GTGCTGCAAG AGCTTTCAAG AAGATGGGTG TTGACAAAAT CATCTCTGTA GAGAAATTAG TGAAAGGAA
 ATTCCAAGAT AATTTTINAGT TTATTCAGTG GTTTAAGAAA TTTTGTGACG CAACTATGA TGGAAAGGAT TACAACCTC
 TNCIGGCGCG GCAGGGCCAG GACGTAGCGC CACCTCCTAA CCCAGTTCCA CAGAGGAGT CCCCCACAGG CCCAAAAAC
 ATGCAGACCT CTGGCCGGCT GAGCAATGTC GGGGGGGCT GCATCTCTCG GAAGANTCCT CCATCAGCCC GAAATGGCGG
 CCAATGAGACT TGATGCCCAA ATTCTTTGAA CTCAAACCA CAGCT

SEQ ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTTA TTGAAACTA TGTATTTTTT TGTA AAAACC TGATCACATA GAGAATATCA GTGGCTATAC CCTCTCTGGG
 CATCAGTTTC CTCATCTGTA AAGTGGGGAT AATCAGAGC CCCACCACAG TGGGCTTCAG GGAGGAATAA ATGCATTAA
 ACATGGCAAG TCAATTAGGA CGGTGCCTGA CAGGCTGTCA GCGCCCAAGG TTGTGACTTT TGCTTTTCTT ATTGCTACTC
 TGCAACCAAC TTTAGATAGT GGTAGANTAA TCAGGAGGCC CTCTTGAATG GGATATTTTG CACAGAAGAG GTCCAGACC
 GAGTGTGTGT GACATGGGAG CAGAAGACCC GGGGTTINAG CCAGGCTCTG CCACTCAIAC GGTGTACAAT TTTCAAAGG

SEQ ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTGCACA TGGTAACTCT GTCATACATC TATAAGCCT AGTAGCTGTA TTGGGTGAGA TGAAAAAAC TGCTTATATT
 CCACAGCAAC ATAATTACAA ATAAGTTTAA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCCTAC
 TTACCAATAA TTCAATAGCAT ACCTCCCCCT ATTTTAAAAC TCATATGATA GCTGATTTC TAACTGTAGC AATCAGGATT
 CTTAGAAAGA TTCGAACTG AATTTAGCTA ACTAAGGAAG CGGATTTTCAT TAAAAATATT GGGTTAGTTT ACAGGAATCA
 GTAGTGGAGG AACCAGGGTT GCATAAAA

SEQ ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTT TAAACGAGAG CTGGACAGTA TTACTCCAGA AGTCTTCTCT GGGTGGAAAG GAATGAGTGT TTCANACTTA
 GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT
 GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCAGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CGGGCATTTG
 ACTCTGCACT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC
 AGAGGATNCC ATGGGAAAT GAAAT

258

SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGTACT CAGGGAAGGG GCAGGAGAAC CACTTGAGCC AAGGAGTTCA AGGCTGCAGT GAGCTGTGAT CACACCACTG
 CATTCCAGCC AGGACAACAG AGTGACATCC TGTCTCAAAA ATAAATAANT TTTTAAATGA TGAAACTAAC TAAGGTACTG
 AGGAGGTAAG ATATTTCCCC ACGGTAAGTC ATTCAAGAAC TAAATGTGAA AAACCAAAG AAGCCTCTGG GGTAGTATT
 CCCAGTCTCC TTGTCTGCCC AGGACCCAC ATTTGTGTAA GTTGCTAATT GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAAACT CTGCTGGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT
 CTCCTTCAGA TGAAATTTTA TTTTITINCC AATAAGGCCA GCCCTACCTT GGAATCTGGA ACCANTTCTG GCCCAGGGTA
 GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CCTGGGTGTC AGGNATGCCT TGGNCCTTAT TATTGACCTT CTCT

SEQ ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGTT ACTGGCCTTG GCTGCGGCCA AGGGAAGACT CTGCAGGCC TATTACTTGG CGGCCTTTAA CTCTTATAGA
 ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTIN CGTTACAAA TNATTTTCCT TGCTTGCTTT CTCTCACCC
 TTTTNAATTT TCCITTTTCIN CTTTCTCTGT CTATCTTACC TTCCCTCCGT GATCCCTGCC AGCCCTCTCT TCTTATTAT
 AGCTGATCAT GGCAGTATTG TTTTITINCTG GGTAAAAATC AGAGTGGGAT TTAGAGAAAG CTTAGCAGGC CTAGCATGAG
 GGCCTTAG

SEQ ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAACTT ACTGTGAAAA TGCAGAAAA CAACAGCAA AATTGATTGT TGACTCAATA TGATATATAG TTCAAATGTA
 AACAAATGCT TGTNAGCATT CCACATCACT GAAGGAAAAA AAGTAAGTTA TTATTTCCAA TGTTGGGAGT TAGGTTGCTA
 TAAGCTEATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCATTCTCC CCTCACCACA CATCACCCC
 TTGCTCTCC TCGACACGTG CAAAATGATA GGGCATGGTA GGGGTGTAG TGAAATNGAG AAGGCATGCC CCATCTCAAG
 AAACAGGGTG GACCAGCCAC AGCTTTCAGC TCCANTTGT GATACAGGAA T

SEQ ID NO:924: (Length of Sequence = 371 Nucleotides)

ATGATCTGCT TTTTITGAT ACCTTTACTT TTNAG AGGNGCGGG TTTCTGGAGC CGACTGAGGG ACTGGAGAAG
 GCTACGGGG TCTCGCCCT GCCAGGCAA TCTT CTCTTATCA TTTGGTTATG CAAATCGCG TAAAGTTTT
 CGAAGGGGG TGCTGGCTCC TCTTGGCAGC TCTCTTACT GACTTTGGGC ACCAGGGCTG CTCATACCTG CAGCCTTTTC
 GGCCCTCTNG GCGCGAGGC GTCGGGCTC CGAAGCACT GCCATGGGCC GGAATAGCAG CCCNGAGCA AGG

SEQ ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTTG CCATAGGACT GATGGATTAA CCAGTGTTCG GCITTTATTG AAGTCTATGC CCTGCACAGC
 TCTGTATGT ATTNAGATG CTAGAAGTTT TTINAGCATG TNATGTGTA TTCTGTGTG AATCTTAGGN ACCTGTCCA
 ACTTGGTTCT TTTTCAAGGT TGTITGGGT ATTCTGGGTC CCTTCTTTT CCATATGNAT TTNAGGATCA GCTTGTCAAT
 ATCTGCAAAA AAAAAATCAG CTATATTTG ATAGAGNTT GTATTGCATC TTTAGGANIG GTTGTGTGAG TATTGCC

SEQ ID NO:926: (Length of Sequence = 247 Nucleotides)

GTATTCATA CCACAGCATT TAAAAAGCAA TCCCAAGTN ATAAAAAAA AAAAAAAA ATGATGTGAC ATATCCATTG
 CCTGANTTGC CTCTTTTGTG AGCCAGINTT GGGATTATAG CAGAGGAGTA GCAGAAATAA NTATATTCAG ACACAAACAT
 ATAGATATAA TAATATCCAA CnCCTTATA TGATTIAGGG TCTCGTTAAA ATGGTTACCA TTTCCTCTC CTAAANTTA
 TATAAAT

259

SEQ ID NO:927: (Length of Sequence = 286 Nucleotides)

GGCTGTCATG AGAATCACTT GAACCGGGA GCGGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT
 GACACAGCAC AAAAAAANC AATGTTCCAC AAGTCAAAA TTGINTTCAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA
 AGGGTATGAA TGACTAAGTT CCTTCTATAA TATATGACT ATAGGTTAGG AGATACACTT TCAGTTCTTG TTTTNGTAG
 ATCTCCAAT GATCTGTCAT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CTGTTTTAAAC CAGTATTIAT TGCACATGGT TTTGTTATCT ATTGCATGTG GTAAATTACC CCATACTTTG CTTCTTAAAG
 CATAGACAT TTCTGTAGGT TAAGAATICA GAAGCAGCTT AGCTGAGCAG TTCTTGCTCA AGGTCTGTCA TGAGGTTGCA
 GTCAAGGAGC TGGCCAGGC TGCAGTCATC TGAAGCCTG ATTGGGGCTG GAAGACTCCC TTCCAGATG GCTCCCTCAC
 AGGCTTGGCA TGTCAAAGCT GGATTGTTGG CAGGGGACCT CCATTCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC
 ATGGCAGATN GCTTCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA
 CCCCTACCCG GAAGGTTTCT AGCAGTGAGG ATTCTCCAG TGACGAGGAA GAGGAGCAAA AAAAACCCAT GAAAAATAAA
 CCAGGTCCCT ACAGTTCAGT CCCCCGCCT TCTGCTCCCC CACCAAGAA GTCTCTGGGA ACCCAGCCTC CCAAGAAGGC
 TGTGGAGAAG CAGCTCCCTN TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA
 ACCCCCAACT AAGGSCAGTA GTCTCTAAAG CAACCACTAA ACCACCTTCA GCAAAGAAAG CAGCAGAGAG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAATCCTT CTTGGGACAA TATTGGCACT CCATTCAAAC CTGTGTTTTCAG GTCAGTCCGC ACTTCATCAT
 CTCCAATTT GTCCAAACA TACTGTAGCT CAAGTACAGT TTTTAAAGCT TTCTGTCAG CTCTTCTCT CATAAGCTGC
 TCCCGACGTG CTGTCTTCTT NATTGTTTTC TGAATATCTT GACTTAGTGC CATG

SEQ ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGINTTC ACAACATGA TGCTTATCTA ATAAATATC ACTGAGCAAT AAGGAGAAAT ATTTTAAATA GATTTGAAGT
 TGTGAACAAA TAATTAGAG TCCAAAGAGG ANAAAGANAA TTAATCTGT TTTTATCCC TAGAACTCAG AAACCTTACT
 GGATTGGTCA ACAAGACAA ACTTTTTTATT GTATAAACA GTAGANTTCA TGGAAAGGAT AATNCTTTTG GAACAGGCTT
 CTCGG

SEQ ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTGGGG GCCCAATATA AAGCAAAGCT GGAAGAAGG ATGATCCATG TATTNTGGG GATGGGATAT GGACAGGGAA
 ATAGTGTTC AACTCCATGC TGAGTGTGT TTTGAATTGT AATGTGAAGT TGCCACCATA CCAGGGCTAT GACTGINTAC
 GATGCTCAC CCTTGTAGGC TAGTAGCTTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCAIT CAGGTAATAA
 AGTCCCTGAG CTCCAGTTG CTAGATCTAA GGAAGTATT TTCCCTTCAT GTCAAAGATG GGG

SEQ ID NO:933: (Length of Sequence = 186 Nucleotides)

CTCTTTTGGG CTGTTTCAAA TCTCCGCGA ATTGAAGCA GTGATCTCTC AGGTGCTAAC CGGNATAGTA TTAGAAGACT
 CCAATATCTT GCAGCTGTG GGACTTACTG TATTATCTT TGTTTTGTT CATTTGCTTT TGGGTCTTG GTCATGAGGT
 TTTGCCTAAG CCAATGCTT CAAGGG

SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GGGAAAACGT ATCAGCACAT GAAATACCTT GTAACITATIT CATTATATATA ATTGCTACG TGTTCITTCG AACATAGTGA
AAAATAATCA TGCTGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT
GAAAGGTTAA ATAGCAAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTATAT GAATACTCAG
ATGGATGGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NTTTTAAAA TAGCTTTGTC TAAAGATTAA
AAATTAAAGG TTCTAA

SEQ ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAGAAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAA
GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA
AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACITTC A GTCTTCTCC ATTCTTGAT GTCTAATGAG
GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TINAGGTGCA ATAATACAAC
TGTTGACTGA CTTTCCAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCCTCTN AACTTINATG AGCTGCCINA GCCGCCAGCC ACCTTCTGTN ACCCAGAGGA AGTGGAAAGG
GAGCCCCCTG ATGCCCCCA NACCCCACT CTGCCCTCAG CCCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA
CTGCTAACC AATNGCGAGA CCACCCAGAA GGAGGGGACC CAGG

SEQ ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTTGCC AGATAAGTA CAGAAGGCC AGTTAACTT GAAATGCATA TGANCAAGAA ATATATTINA
GTATGANIAT GTCTCATGCA ATATTTGGGA CATAATTATG CTAAAGAAAG TATTCACAGT TTNCCAACA TTCAAATTGG
AATGAGTGC CIGIATTTIN ATTGCTAAA ATGGGCAACC CTAAAGCTGT ATCTCTACAG TTACATACAC TTACCAACCC
CACCCATCA TACTGGTCCA AGTTACACC CAAAAGAGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA
AATGTTTCAT TCTGCCTTCT GGATTNCTGT ATGAAGACTT TTGTTGTGAA AGATATGAAT AGAACC

SEQ ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTTCA GAATTAAGAA GCCTTGCCCT CTTTGGTGT CTTCACAATT GINTTAAGTC TATTATAGTA TTCATTTTAG
TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTTGACAT
GGGTCTGCT CGCATGTATC TTTCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAT ATCAGGCTTC
TTGGTGGA GAAATCTGGA CATTTTINCT ATGAAAAAA AGTTAGGTTA CATGGCATT AATTTTTCG TAGACTTAAC
CTACAGAAA TGTTTCAAGC TTATAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAGC CTCACAAGAA ATAAGGTGCT TATGGTGTG AGTTACAATG GAAATAATC AATGGCATTT GTATGCATGC
TGCTATGTG ATGTAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGTGATCA TCAAAACCCA
GGCTGTGGAA AACTGTCACT CAAGTTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAATCTAT AGATGAAGCA
ATTTAACAA CCTACCAATC TCATTTAATC TTGATTACTT TTAATAAAG ATTAATAAGA TGACAGAGAA AGGGTTTAA
AATTTGTAG ACACGGCTGG ACGGTGGC TCACACCTGT AAATCCAGCA CTTT

SEQ ID NO:940: (Length of Sequence = 385 Nucleotides)

261

GTAATCCCAG CTACTTGGGA GGCTGAGGCA TGAGAATTTT TTGAACCCGG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC
 GCCACTGCAC TCCAGCCTGG GCAACAGAGC GAGACCCGTG NTCAAAAACA ACAAAATAAA TTTCCTTTTA ACATCTGTNC
 CAAAATGAG ATAAGCGTTA TCAGGGCAAG TCCATCCTCA TCACTCTTTC CCTCCCCACT GCOCTCTCCA CGATGCCAG
 CTGATCAAAA GTCAATTTTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTG ANCATCAGAA
 ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGT ATATAATACA GCTTC

SEQ ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TTTTACCAAC AATTGCTTGT AGCTAATGTA GAACATACIT GAGAAAATGG CTTCTGTGAA AGACCAGTTA
 GTACCAAAAT AATCTGGCCC AGAAAAATAG CCACCATTTCT TGAATACATT AATAGAAATA GAATAACCCC CAAAGGGAGA
 TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTG TGTCATTG GAGCTCCAGT GCTTTAAAGC
 TGAAATGAAT CCTGGCCTTT CACCACCTC CCTGCCATA GTATGGTATA TCCTCTTAT CCTTCCCTCT TAGCTTACTG
 AGAGTGTAAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAGA GATGAATTAG CAGTTAATGG
 AGGAGT

SEQ ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTTCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG
 CATCOGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCCT TGAAGCAAA CCTGCCANTG GTTATCAAGC TCCTTACATA
 CCCAGCACCG ACCCCCAGGA CTGGCTTACC CAAAAGCAGA CTTGGNGAA CAGTCAGACT TCCTCCAGAG CCTGCAATTT
 CTTCAATAAT GTCGGGGGAA ACCTAAAGGG CTTAGAAAAC TTGGCTCCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GTGCCATTAC AACTTINCTG TAACCTGAA ATTGTGTCAA AGTGAAAATT TTTTAAATGA GATTATAAGA GCATAATCAA
 ATTGGAATTT CCTAGGATA CCAGAGAATC ATTINCTTCT CAGGTAAAGG ANTTTTCCT TINGTAGTCC AGAGCTATAC
 ATGATTAAGA AANTGTTTCA NCCAGGAAGA TGACATCTCT GCTAACCTAA TCGATTATCA TGG

SEQ ID NO:944: (Length of Sequence = 327 Nucleotides)

CCAGGCACTC AGGCTGGCTG TCCCTTNNNT CCTCCTGCC ACCCATCCA CTCGAGCAT CAATGCAGCC GGCCAGTTGC
 AGGCAACCAG GCAGCACCTT GGCTGCCAG GCAGGCTAAG AGGCCCCAC CCACTCCCC CTCTTTGCC AGTGGAAGAG
 CTGCGGTAG GCATAGCTTT CCCAGCCTC CCTGCTTCAN AGGCAGGAGC ATGGCACTCT GGGAGTTGTA GTGCTCATAA
 CACTCAGGCG ATCCCTTGTG CAAATACTG GAGGAGAGGA CTATGGTATT GGGGAAGAGA AATTNAGGAA TAAGCAAGGA
 GTTGGCT

SEQ ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTTAGTTT TCCAAACCTT TCCTCTGAT TAAATGCCCT TAAACTTAA ATCTCTTGTT
 ATCTTCAGTT GTGATCTAGT CCAAGTGGG AATTAGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG
 GCTGCCTAGG CANTTIATGA TTAGTTTCAC AGAATAGCAC CCACTGGCTA CACAGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCCTCATC TAGGTATGTA TATAGCTCAT TTATTTAGGG GTGATGTAA AAAATTGAAT GCCCTTAATG
 GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACTTTT TCCCCTGTG ACTGTGTGTA TTGGTATGGA AGTATTTTTT
 TTTTCTCCA GCTTTTATTT CAGTTTCAAG GGATACATAT GCAGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT
 TAGTATACAG GTTATTTTAT CACCAGGNA ATAAGCGTAG TACCTG

262

SEQ ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGTGCAT TTNCTCCCC TTGAAAGAT TTATGTAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CTCCTGANTG
 GGGAGATGTT GTTAAGCAAT CTGGATTCT TCCAGAAAGC ATGTATGANC GTATTCTCAC TGGTCCCGTT GTGAGAGAGG
 AAGTAAGCAG GCGGGGGAGA CGGCCTAAAA GTGGAATTGC AAAGGNCACA GCAGCAGCAG CTCTGCAATC TGCCACCACT
 GTTTCAGGCA ATCCTTTTGT TTAAGCCAAT GGACCTACTT CCAGGGNGTG GGNCTCACA AACTTNTTTC AGGGCCTTAC
 AACAAAAACC TACAA

SEQ ID NO:948: (Length of Sequence = 216 Nucleotides)

GGATGTAAGC TCCAGACAG ACATCTCGGG AAGCTTCGGC ATCAACAGCA ACANTCAGTT GGCAGAGAAG GTCAGATTGC
 NCCTTCNATA TGAAGAGGCT AAGAGAAGGT TCGCCAACCT GAAGATCCAG CTGGCCAAGC TTGACAGTNA GGCCTGGCCT
 GGGGTGCTGG ACTCANAGAG GGACCGGNTG ATCCTTATCA ACGAGAAGGA GGAGCT

SEQ ID NO:949: (Length of Sequence = 369 Nucleotides)

CCCTTCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTACTGCAAT TACCATGACT
 CTAAGTGACC TTCTTGCCCA ATGTTTAATG CACAATGGAC CGTGCCAGG GAGACCTGGG CATTNCTGTG TGCTTTGTTC
 TACAATGATC CCTTCTGTTC TAGCAGCGTG ANTCACTGAT GGTCACTACT TCTGAGGACT GTACGCATT TCAACCTATA
 TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAGTTTA TTTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA
 ATAACCATTN GTCACCTTTT AAAGGAATGG TATTTAACAT TTATTTATA

SEQ ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGTGAAA TAGAAGTCCA ATTACCTGGG GAAACTTCAT CTTAACCCCTC TGAATTTC AGTCTAACCT AAATATTGAT
 ACTACACCTG CAGCAGCAAT TAGTTTAGCA TGTAGTGAAA AAGTAAGTCT AAAAAATATT TNCATAATCT TTGGTTCCTA
 AAATTGTTTT AAAAGAGATG CAGTGACATA TGTCTGGAGT TTGCTTATGG CCATAGGTT AATGCTTCTA GCTTCTATGC
 TTATTGCAA TTTTAATTAT GTGAATATGC AATTTTCACT TATATTTG

SEQ ID NO:951: (Length of Sequence = 302 Nucleotides)

TGTCACGATG TTACAAGAAC GATTCCGGGA GTTINCCCGA NACACCGGGA ACATTGGGCA GGAGCGCGTG GACACGGTCA
 ATCACTGGC AGATGAGCTC ATCAACTCTG GACATTCAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA
 GCCTGGGCCG ACCTCCTGGN GCTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCCTAT GAACTGCACA AGTTTTACCA
 CGATGCCAAG GAGATCTTTG GCGGTATACA GGNCAACAC AAGAAACTNC CTTGAGGAGC TT

SEQ ID NO:952: (Length of Sequence = 302 Nucleotides)

TTTTTTTNT CCACTTCACA GTTGATGCCA ACCCAGCCTG CATCACAGAG ACACTTATAT CCACTGAGAC CTCCAGTACA
 GTTTCATGG ATGCAGGGAT TGCNCAGGCA TTGTTTACC TGTTAGTAGC AGCTGGGGTG ATGGGGTCCC TCGGGGCATA
 TACAGCGGAA ACCATTACA CCGTTGATAC ATGTCACC CTTGCGCAG GGATTGGNGG CACACTCATC AATGTCAATG
 TTACATCTCT GGCTGTGAA ATCCTGGTGA GCAGACACAA CTGTAGCGAT TAATTGCCAT CC

SEQ ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAAAINAAC TTGTTTGAA AAGTTAGTAT GGGTTAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT
 TCATGGCATT CTCTTTAAT ATGGGCTTIN CTGTGTTAGT TAACATCTGA TAATATGACC CCCCAATCTA TTAATATTTA
 TTATACTCAT AAAATTACAG AAAAACCTA AGAAAGGGTA TGTATTGAAG TGAATGAAT AAATGCAAAA AATGTAGTAC

263

TTATAACATT TTGAAGAAAA TCTTTAAAAA TTTTGTGTTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTTAAA AATAGTGAAG TCTTTATAAG TAATTTTAA AAATTTAAAC TAGGACCATA AATTTCTAAA CTATGAGATA
AATGANCAAG AAAACAAACA GGTGTTTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACGTGA TTTTAAATGA
GANTTAACAT ATTTTNNTTT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEQ ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTTGATAG AATTTTCTAG TGAAACCATC CTGACTTGGG GTTTTATTTT GGAGGAATTT TAAGTTATTA ATTCCGTCTC
CTTAATAGTG ATAGGACTAT TCAGATTACC TTATTTTATA TTGGGTGAGT TTTGGTAGCT TGTGTTTCTC AAGGAAGTGA
TCCATTTTAT CTAAGTTGCC AAATTTATGT GTGTATAATA ATTTGTAGTA TTCCNGTATT ATCCNTTGA TGTCTGTAGG
GTCTCTAGTG ATATCCTATG

SEQ ID NO:956: (Length of Sequence = 216 Nucleotides)

CCCTATTAAA TCATTAGCA TTGCATGCAA TACTTTTINCT GTGAAATTA TTAACCTOCT GGTATATAAA ATTATTTCTA
GTTATGTTA AATATTTCCN CTGGGATATT ATCATCTTAG ATCTGTAAAG TGGTACTAAA ATAGTTAAAA ATTATTTNTA
AGATATACAC AAACAGAAAA ATATAAAANC AAATGTATCT TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGTACCAG GTGTGGAGCC TAGAACAGAC ACCAGTCAGA AGTGACAGATA AGGTCTGACT TTCCAGCATA GCCAGGGGAC
TTGGCTGACT CCACATGTCC CCAGGCTTA CTTAGCTGTA AAGCAGGCAG GTTGTGAAGT CATAGTGGCA GTTTATGAAA
TATTTAGGGG ACCTAATAAT CTTTAAATTG TATAACATTT CTGCATAAA TTTCCCTTCA TGAATCCTTT CATGACTTAG
ACCATCTATG ACATGCTTGG ACTTTCTGAC TTGTCTTAAC CACCCCTCTC TTTAAACAAC CAGTCTTTTT ACTTTAGGAC
AAGAATTTAC CATACAAGAT TCTTTGTAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAAATGA ATTTGATAGC AGATTGTTAG AGATTAAATTA CCTATCATAT GCCAAAGCCA CTTCCTACAT GTCAGTGCTA
AGGAATCCCC TAGAGATGGA ATTCCTAGGT TCAACTGAAA ATTAATTGTA ATTAATATAA TAGGTTAATT CATTGTAATT
ATTTTAAAGC CTTTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGTAC AGAGAACACT TGATGAGAAT
GINCTAGTAA TAAACCTTAA CCTCTGGGG AAAAAATCCT ACTGTCTTTC CTTCTGGCTT CGTTTCTTCT GGAACATATT
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCCTA CAAGGTGENT GCATAACAT GCGTGGGCCC AGATGGACTG
TGCTCATGG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGC ATTTGGGGAA TTTNAGAGAA
AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAACAGCA TATCTTAGTC CTCATCTAGG GTATAAACA
GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAATTC TGTGTTTTTA AGCCACCTAG TTGTGGTCAC TTGTTATGGC AGCCTTTGGA AACCAACACA CCCGCACATG
GCGTGTTTAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GGNIGTGGTC ATCAGCAATC TCCAATACCT ACAGCAAATG

264

GGAAGACAGG GAAGGACCAG AGGTGTAGGT AAAGCAAAA GCCACAGGTC ATTAGGAAGT GATGCTCCAA CTGGGCATGG
 AAAAGGAGTT TGGAGTTAGG AACACGACAG ATCTGTCTGG ACAAGGNTCC AGATCTCTCC TAGGGGAAG NAGGGCAAC
 TIAGGACAGT TTTTGTGTCT GTGG

SEQ ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAGG AACATGTCTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTTCTTCC TTGCCACAT CAGTGGGTGA
 GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA
 GCATCCCTTC CTCCTTACT GAAGCTACGC AGGGCTTGA CTATGTGCCA TCAGCTGGTA CCATCTCACC CACCTCTCA
 CTGGAAGAAG ACAAGGGCTT CAAATCACCA CCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT
 CATAGGG

SEQ ID NO:962: (Length of Sequence = 369 Nucleotides)

AATTAGATT TGCAAGTTTT CTACATTTTC AAAACA AAAAACA AAAAACA ACAACAAGAA ACGTAGACTA
 GTTGGGCTCT GTCATGCCCA GGACATGAAT CAGCCCTCA TCCAGCTTCT CTGACCATTG GTCATTAGT GGTCTTCTTG
 GTTTCAGAT AGCAAGAAGG GTGATTACAG CACGATATTT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATTGG
 TTGCTGTAA TCTCTCACTG TNCITTTGTTA AGCTTTATCA TGGTATTCAC GTAGAGGGAA AAAGCCACGG TATAGATATG
 TAGGGTTCCA TACTATCCAG TCTCAGGGCA TCCACTGAGG GGTCTTCT

SEQ ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAACACC CGAGGCGGG AGGAAAGAGA AGCCGTGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG
 AAAGTGGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGGTTT CGGGAGCAGC AGGCGACGCG
 GGAGGAGAGA AAGCAAGCCA GAGAGGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAAATTN GAGATCTCCG ACTCGGCTCC
 CCCAGCGCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCTCLG TATAGACAGT CGTGAAGAAC AAGGCTGAGG GATTTTNAAG TAAACCCATT TTCAGGATGA CTACAATCCT
 TCCACTTCTA GAAACTTAG AAGTACAAGA AATAGCTCTA CTACGGGTAA CTGATTTAAC AATTTCCCAA ACACCTTTTC
 CACTACCCAA GCCCGTGGCC CTCAGAGAGA ACCGGGATGG ATTGCCATCT GGGTTCAGAG GCAATATGAG GAGGTGGGG
 GGATGGCAGG GGCATCTCA GGGTTGGGG GCAGGCCAAG GGGATGAGAT GGCAAGGAC AGCTTTNGGA ATCAGATAGA
 CGATCCAGCG TGCCCTCCTA CACTTGCA

SEQ ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTCAGGAAC AAGCTAAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTGATG
 CTGCATGCTG CTGATGTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA
 AGAAACAACA CAGAAAGCAG AATCAGATT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAAGGATG
 AAGTTTCCAA ATGTGTATGT CGCTGTGAAG ATCTGGAGAA ACAAAACAGA TTAATTCATG ATCAGATCGA AAAATTAAGT
 GACAAGGTCG TTGCCTCTGT GAAGGAAGGT GTACAAGGTC C

SEQ ID NO:966: (Length of Sequence = 163 Nucleotides)

265

CTGCCTTCTG GGTTCAGCG ATTCTNATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCAGT
TAATTTTTGT ATTTINAGTG GAGATGGGGT TTCGCCCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA
CCT

SEQ ID NO:967: (Length of Sequence = 365 Nucleotides)

GTGTCAGTAA TATGTTGTAC ATATTATINC ATCACCAGG TGTTAAGCCC AGTNCCCAAT AGTTACCTTT NCTGCTCCTC
TCCCTCCTCT CACCCCCCTG CTTCAAGTCT ACCCCNGTGT TTTCTTCTTT GTGTTCTTAA GINCTTATCA TTTAGCTCCC
ACTTGTAAGT GAGAACATGC AGTATTGGT TTTCTGTTCC TTTGTTAGTT TACTAAGGAT AATAGCCTCC AGCTCCATCC
ATGTTCCAC AAAAGTCATG ATCTCATTCT TTTTATGGC TGCATAGTAT TCTGTGGTGT ATATGTACCA CATTTTCTTT
ATCCAATCTG TCATTGATGG GGCATTIAGG GTTGATTCCC TGTC

SEQ ID NO:968: (Length of Sequence = 390 Nucleotides)

GTGTATAGTA ATTTAATAGT AATTAAATGT AGAGTATTTG TAAAAACAAG GAGAGGAAAA AGAACAATTC ATATTTGAGA
ACTCCTAATA ATCTTCTAGA GCAGAGTTCA AAGAAGCAGT GGTAAAAATA AAGCCAAAGA GATATAGGGG CTAGTCTTAG
AACCAGGACT TCCTATAGAA CCAGCTTCCT ATAGAATCTG AACTTTATCT GAAACTCTTT CACAGATCTC CTCCACCTTA
ACTTCCACAA AATAAGAAAT TTGGATTTTG AAGGCAAATT TGTATATTTT AAGGAGCAGG ACAATCTCAG CTGTATCTGG
GTTTGCAGAT ATCCAACAA TCCTACCCAA ATCACTTTTC CAGCTGCAGA CTTGGAATTT CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTTGAA GAGACGGGTC AGGAAGTACG GGAATTACTG GAGGAAGAAA AACTAAGTTG TGTGCCAGTN
CTCATCTTG CTAATAAGCA GGATTTGCTC ACAGCAGCCC CTGCCTCTGA AATTGCAGAA GGACTGAACC TGCTATCCAT
CCGGACCGA GTCTGGCAGA TCCAGTCTTG CTCAGCTCTC ACAGGAGAGG GCGTTCAGGA TGGCATGAAC TGGGTCTGCA
AAAATGTCAA TGCAAAGANG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTCGGGA GCGAATTCG GGCCTTAAAA
ACACTAATTT GCTGCTTTCT

SEQ ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTAAAGATG GGATCTCAGG GTTACCCAGG CTGGAGTGCA GTAGTGGTC ATAGCTCACT GTGGCCTCAA ACTCCTGAAC
TCAAACIATC CTCTGCCTC AGCCTCCCA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCCTGGCTAA TTTTAAATT
ATTTGTAGA GATGGGGTCT CACTTTGTTG CACAGGCTGT TTGCTTGATT CTTAAGAACG TATAGGGATC CAGCTGTACA
GAGCTTCTG CAGTCTTTTG TAATAGAATT AGTTGTTAA ATTGTACTTA TTACATGAGG CATCAAAGAC CTTGGAATAA
AGCTATTNCC TCACATATCT GGGCCATTAT TTTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TTTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNTC CAAGATGTAA
TGAGATTCTN CTTTCACGTC AACAAATTGCC GCAAATNCTT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA
TAACCAAAC AAATTTGAAT CCAAAAGGTA GATGTTGAGA GTCTTGTTGG TTCTGCAGCT CAGGCCCTGT AAGTTTGTGC
TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGINCTCTT CAATGTGAGG GAACGGGAGC TTNGGGGCAT CAACCTCACA
TTTTCTTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCCMTTACA TCAATATATCC TCAATGGAAG AGGGGATATT GCACACAAAT ATCATAAAAG CACTACATAT TACTTTCACT
GGAAACTAAT TTNCTACATT AGATATGACT GGATAGGATA GAAGTGATGC AGGATTATAA GACATAATAC CATACACAGC

266

TGCAGACTGA CACAAACACC ATTCAGAAC AAGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GGGCTCAAGA CCCTTCTTT
CCAGTGCTGG AAAGAGGGGC TGCATGCACT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GGGTGTCTC GAAAGGGCAG
CCCGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAAGTCA GAGAAGCTGC CTATTT

SEQ ID NO:973: (Length of Sequence = 401 Nucleotides)

TTCTCAAAC TCCAGTCTC TTCTGGGCC AAGATCTGGT CCACCCTGC CGTGGCTCC TTCCCCTGGC GGATG T
CCGCTCTGA GCAGAGAAC TTTCTTCCC AGCAACTCT TCATCTGATG GGAGGAGGA ACTGAATAGC TTTCC
GGGAGATAAG AAAGAAGAGT GTGGTGTGA CAGGGAGCTT TGAGCTGTGG AGTTGGGCTG GGCATGGAAA ATNCGG JGA
GAGTAGCAAG GAATGAGGGG CTTGAGAGAA CTCTNGGATC AGCCCTCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG
AAAA AGGG GCTTCTATGA TGAGTCTGGC AGCTNCCAC ACTGCATTCT CCTCTGCAT TTTTITACCA TGCACCAGGG
C

SEQ ID NO:974: (Length of Sequence = 311 Nucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTGTGCCAT
CTTGAATGAG ATGGAGTGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT
CTGGGGGACA AGATTTCTC ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG
GTGCTGCGGG AGTGTGGCGC CACATCTTT ATAGCCACAG GCTTTCGTGG GACTTNCCT GGGGTCTTC CCTATTGGC
TGGGTGACC ATAAGCGCA AGTGAATGTG GCAAACTCA ATTCAATT AA

SEQ ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTGG ACAGTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TTTAAATAAT
ACCCCTTGAA ATTTTTCAGA CTTTTCACAG CTCIAAAAAC ACAACATCAG ACATAACATC ACACATTTGT TCCAAGGAC
TAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAGGGACA GTCCCATCT TTCCAAGGAG
TGTTTTTAA GAGCACTAA CTCTGTAGG TTATCAAACT ATTTTINAT TCTAAATAAA TAAAGACTA ACTGAAGGTC
TCAGGTGCAC ACTTATTTTT

SEQ ID NO:976: (Length of Sequence = 343 Nucleotides)

CTGTCCCTA AATATTATTA AATTTTAAA AATTAGACAT TTGGTCTAAA TTAGACAGGT AAGATACTAC TGTCCTTACT
AGATGCTTTA AAGTCATAAA CTGCTTCTAT GGCTTTINAT AATTGINCAA CTTGCTTGCT TTAGAGCCAT TGGATTCTAG
GTAAGGCCTA GAGACATTTG GAGTTAGCCA TGTCCCTTAG CTATGCTAGA AAGAGTCCGA CATTATCTGT GGTCTGTCC
TGTATCTAC ACTCTACACC TGATACATAA TTAAATTTAC TTACACTAAA AATAAAAATG GATGCATTTT TTAGGTAGGA
AGGGTATGGG AAATTATAGG TTT

SEQ ID NO:977: (Length of Sequence = 265 Nucleotides)

ATCTTTGTA TATCAGTGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATTGA AGAATAAATG ACTAAATGAC
TGTATCAAACT ACTTGCCCAT TGTGTCTGT TTCTGANTTG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGTGA
GAATATGATT CTNTTACCTT AGTAAGAGAG CCATCAGTTT ATTGSATGAT AGTTATATGG AAAAAGAAGA AATGCTACTG
TGATAAATAT TTATAATTTT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCGCTGGCG AGGTGGCCAA GATGSCACT GTTCTCTGCC TCANAAGAAA AGGCACTGAC GCACTGACCC
TTTNAGGTTG TNGGGGTGT GGTCACTGCC CTCCTGCTG AGGTCAAGT GTGTTTTCAA GTCAACTTCA GCAGACCTCA

267

TTTAACCATT TTTTNTTCCC TTAAAAA AAAACCCAAA AAACCAAATC CCAATAAATA TGTATTTTTT NTCCATCACA
ATATTGCTTT AGAAAAATAA GAGCCGTCAA GCAGCAATTT TTCCT

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GTGCGTNCAC ACTCTCTCC TGCTCCCCAA ACTCTCATC ATTGAAGCCG AAGTGGTCAA TGAAGGCAGA GGTGATGCGC
TGCACTCGGA AGTCCATGAA GGCCTGCTGC AGCACAGCCT CCTCAGGGAA GTTGAAGTCC TTGAGCCGGT CGTCTCATC
GTCAGTGGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTCTT TCTGTGTGGT CTCGCCAGG GGGCCCGATA
CGAAGGCTTC CCACTGCTCC TGCTGCTCGC TGGGCAGCTC CTTGAGCAGC TTGCCGCAGC TGCTCTGCAA TTGGGG

SEQ ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACTGGCTT GCCTTCATCA TCTCTGCAGG GNTCAGTAAA GATTAGAAAT GGATTATTTA CCTGTGTATA CAAATACACC
TCTTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTATA CGCCTGANTC AATCCCATTA TCTGCATTTT
TGTTGTGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG
ATGCTTCTAA TCGCTTTTAC AAGGTCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTTCTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GTTTATTAAAT ATTAAACAT ATTAAATAA TACATGTCNA TAATGAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG
CAGTATTCCC CTTCCAGTTC CACTCTTGAA ATAACCAGTT AACAAGATGA TGAACATCTT TCCATGATGT TCTCCAAGAT
TCATATTATT TTGTCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCAGCAA GTAAATCCCA GCATTTTGGG
AGGCTGAGGC GGGTGGTICA CTTGAGATCA AGAGTTCGAG GCCAGCCTGA CCAACATGAA GAAACCTGT CTCTTACTAA
AA

SEQ ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTTCAGCA TCAACAGGGC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGTNTTCC
AGGTGCCCTC CTTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGCTCTC TCCATGGCTT GGGTAACATG
CCAAAGGCAG GTCATAGGGC AGACTCAGTG GGGGTGGGG CCTGGCTAAC AAGCAATGGA GAGAACGGGG GCCATCCAGA
GAGGTGGCA GAAGAGAGCC CTTGGGTCAA GAGAAAATT TGGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTTGT TTGTTTTAA AAGCTGTCTT GTTACTGCTT AAAGTCTCCA AACTGTTATT GAGAACACTG ACCAGAGCCC
TGTCATAGA CCAGTGTITT TCCAAGTGCA GATTGCAACT CTTTTCAGA GTAGGTGTG GAGCATTIN AGCTGACTAC
TCACCAGCTT TCTTCAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATGTGAAA GTGAATTGGA TGCAAAAAGG
GTAAATATTG TNGTTCAGA CTTTTTTGGG TGAGTGTGCA TGTTTCACA TACTGGNTCA CATTATAACA TGTATTGCTC
ATTATGGGTT GTGGTCAGAA AAAATTACAG AAACGCTGTC TCAGACTGTC CCAAGTTGT ATTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GTGGTATGAG GTATCAATGA AATACATTTA AGATGTACAT TGGTTTGT TT CAGAAAGGCG AGACAAGTCA AAGCGGGGAC
TTCCAGGCTA TAGGTAAATT TATACATTTT CTGGTTAAGA TTGGTTGAGT TTGTCTAAGG ACCTGGGATC AACAGAGAGG
AAATGTTTGG NTTAAGACAA GGATTGTGGA GACCAAAGTT TTAATACGCA GAGGAAGCTC TTAGCTAGCA GGCATAAGAC
AGAAGAGGCT GTAAATGTT TTCTTATGAG ACTGAAAAGG GTGCCTGACT CTTAATTGAT TATCTCTG NTCTGGAAG

268

AAAAAAAAA GGAATGGCC AGGTGGGTG GCTCAGGACG GGTCTGGTGG CTCACACCTG TAATCTTTCT TAAAACGTTA
TGAAGTTC

SEQ ID NO:985: (Length of Sequence = 439 Nucleotides)

TGGTATACCT TTGTTTTTTT TTCTACTTGT TAGTTGTATT AGTATCAAAT GGCATAATAA AGTTACTTTG TTGOCATTT
CCCCTCATC TGAAAATCAC AAAAGCATT TATTTCTAAG ATTTATATCC ACTGACCTTT TCCCCAAGT TATTTTCCTG
TTACTTGTAT TTCACTTTG CCGTATTTT TTTAATATTT GTATTAGAAT TAGCTTGCTC TTGTTTCCTT CACGGCAAAT
GTGTTACATT GCCCACTGGG TGGCTTCTGC GGATGCCCT ACCCACCTT CGTCTGGAGC AGAGAAGTCC TGTAGCCTA
GCAGCATAGT GGTCTCTGC AGTCCGAGGA GTGTGCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCTTGGC

SEQ ID NO:986: (Length of Sequence = 286 Nucleotides)

CGGCGACGAA CATGGAGA CTGAGCTTG GAGCGCAAGT CCTCTGCGG GAAGAAGTGT CGCGGCTCCA GGAGGAAGTT
CACCTTCTCC GGCAGATC AGATGTTG GCGAAGGACC TGGAGGAGTC GCAGGGCGGC AAGTCTCTTN AGGTCTCTC
GGCCACCGAG CTCAGGGT CTGGCCCA GAAGGAGCAG GAGCTAGCCA GAGCCAAAGA AGCCTTNCAG GCCATGAAAG
CTGATCGGAA GCGCTTA CTGAGAAGA CAGACCTGGT GAGCCA

SEQ ID NO:987: (Length of Sequence = 381 Nucleotides)

TCCAAAGGTT TCCATCTC TGGATAA ACAAA TG GTACATCTAC ACATGGAAT TTGGA GATGAAACAG
AATGTTGAG GGCACAC CATGTAT GGTG TG GTCTGCTCC CATTCCA CAGGCA GGTGTGCT
GGGTGAGGGG CTGGGAG GGCAGGAG CATC AAC AAGGGTGGAA GC AAGA GACCCAG TTTGAGGGT
GTNTACATG GTACAACCA GAGACTTGGC GTGC AAGAA CCAAGAAAC ACTCAGGACA CAGACAT CTGCAGGGAA
CCTGGGGGGT GGTGAGGAAA GTGTCACG GGTGTTGGG GGGAGACTTG GAGGCTCTC T

SEQ ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAACAGCT TAAAGTTTAG TTTAAAGTT
GTAGGTGATT AAAATAATTT GAAGGCGATC TTTTAAAAAG AGATTAANCC GAAGTGANTT AAAAGACCTT GAAATCCATG
ACGCAGGGAG AATTGCGTCA TTTAAGCCT AGTTAACGCA TTTTCTAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG
TGTAGGATG AAACAATTG GAGAAGATAG AAGTTTGAAG TGGAAACTG GAAGACAGAA GTACGGGANG GCCTCCTCA
TGTTTACAAT TTAATTAAT TTTTATTATT TTAGGTGAA TTTCTTACCA AACATTACCC A

SEQ ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCTTGGG CTGCAACCT CTGCTCTCTG GGTCAAGCG ATTCCCTCTC CTAT ACC CAAGTAGCTA AGAT 3
CATGCGC CTGCTCTGCT TAATATATAT ATATATTTTT NTAGTTTITA GTAGAGCGG GGTTCACCA CGTT 3
GCTGCTCTCG AACTCCAGAC CTCAAATGAT CTGCCCCCT TGGCTTCCA AAGTCTGGG ATTACAGGCA TTAGCCACTG
TGCTTGGCCA ACAATATATA TTAATAAGC ACACATACAA CAAAGTAGG TGTGTTAAG CTTACAAAAA TGTGACCACT
AGCTTGTGTA AACCTAATT TTTATTTGTT CATGGAACCT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA
ATCTTTTITA GGTGCTGTAG ATGAGCAATT GG

SEQ ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTCTCTC TCATTAGCAG TTTCACTCCA CAGCTGGGGT ATTAAATTG TNAGTCATTG AAATTAATCC
CTGACTGAAT TGGAAAGGAA TTGTATTTGC AGTATTTGGA TTTATTTATT TTNCAGGTAT GGAATCTGG TGATTTTGAA

269

AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTTC TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA
GTTTCATTTT ACITTTTTTNA TTGTTGTGTA GACGGAGCTC ACTTTTGTC AACCAGGCTGG AGTGCAGTGG TGTGATCTTG
GCTCATGGCA GCTCTGCCT CGCTGGGTTT AAGCGATTCT CCTGCCTCAG CCTCCCGAGT AGCTAGGACT ATAGATGCTC
GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGGCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGGG
CCGGCTAGAA CAGCGTTTCT AAGAATCCGC GCCACAGCAG GTCCCGGAT GTTGGGGCCT TAGTGTATC GAGCTAGCCC
CAATCCTCAA CCGATCTTC AACTTCTGGT AGTCCTAACA GAAGTCTGT ATTGAACCAG CCACINTGGC CAGGGAGAAG
TAATCCTCTG ATAGTTGAGG TTCTTTTNC TCCTCTGGAG CAGATAGTGG TGCTCTCTCC CCACAAAGCT CATGTTCTGC
TGGAAGAAAT GGAGATGGCG CCTTGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAAA TGGCCACTAC TACCCTTGG CTCAGAAATG CTAGTCTTTA TTINCTGAAA TGTTTTATAT AGAAAAAATT
TAATAATAAA TAGACATTCT TATATATTT CTTACCATTT NAGATTGGGT TAAAAAGTAT GNGACTTCC GGCCGGGTGC
GGTGATTCAA GCTTGAATC CCAGCACTTT GGGAGGCGGA GSCAGACAGA TCATGAGTTC GGGATCTGTG GCTAACACAG
TGAAACCCCG TCTCTATTA AANTACAAA GGAATTCCTG CAGCCCGGG GATCCACTAG TTCTAGAGCG GCGGCCACCG
CGGTGGAGCT CCAGCTTTTG TTCCCTTTAA GTGAGGGGT AATTTGAGC TTGGCGTAAA TCATGGTCAT AGCTGTTTCC
CGTGTG

SEQ ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGGAAGGAC CGTGCCGGGA CCCCAACGAG GCANTGGGG AGTTTGCCAA GGAAATGAC ATCTCCTGTG TCAAAATTGA
GCAGGTGATC GGAGCAGGGG AGTTTNGCGA GGTCTGCACT GGCCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTTNGG
CCATCAAGAC GCTCAAGTGG GGCTACACGG AGAAGCAGCG CCGGGACTTC CTGAGCGAAG CTCCATCATG GGCCAGTTGG
ACCATCCCAA CGTCATCCAC CTGGAGGGTG TCGTGACCAA GAGCACACCT GINATGATCA TCACCGAGTT CATTGAGAAT
GGCTNCCTGG GACTCCCTTT CTTCGGGCAA AACGATGGGC AGTTTCACAG TTCATCCAGC T

SEQ ID NO:994: (Length of Sequence = 384 Nucleotides)

GTCTTCCAG TTCGGAAGGA TAAATCAAA TTCCCACTTT CTGGGGTGGG TGCCCAAAAC CTTCACTACT CAAGTGTCT
CCAAGTGCAA ATGTCAAAAT GGGAGGAGGA AAGGGTTTAA AAATTAGAGA AAATGTATG CACTTACGGA CTTAAAAATC
CGAAAAACAT AGTAAAAAGA CAAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAAG CAAAAATAA AGGGACATTT
TTCACCTAAA CTACCTAGAG GGATTTTTG TTTAGTTTTT CTTTTTCTT TTTTTTTTCA TTTTCCAGTT AAGTCTATG
TCTTTTNGTA AATTCCAATA CTTAACTGC AAGTCTGCAA TCGTCTCTGA AGTCAGTGAA ATTA

SEQ ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTTTAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGGAACA CTAAAGTATA GAATAATAGC
AAACAGAAGG AGCACCCTAC CCTAGGGCT GAGAAAGAGC ACAGGGAAGT CCTTTTTTNT TCCTGGACAG AGATCCAGAC
GAGCTGGAGA AAGAAGTTGC TATGTTACTG CATCANTGGA ACTTGCTGGA AATCCACCCT CAAGGGCACT AGGAAAACCT
GTTACAGGGA GCTGTGGAGG GAAATGGGT TGGCAGGAAA GCTGCTGGGC GCGGGGTGCT TCAGACTGCA GTGTATTGCA
GGAGCTTGGG CACTGGGGAA GCTGTGTGCA CTGCAGGATC CTGCTGAGCC AGCACATCAG ATCAGG

270

SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTACTGCTGT TGGAACACCA GCTACTGTNA CTACCCCTGC CAGCAAGCCC
 ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGTAC TGCTCCTCAG CAGGAAGCGG ATGCTGAGGT GAACACAGAA
 AACTAAATA AGTCTCCCA GGGGAGCTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA
 GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

SEQ ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCAGCCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT
 GGAGTCACCG TCGTCCGGTA CCGCAGCAT GGGCAGTGCT GGTGGGCTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC
 CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCACTCT TTCACATCAG
 GTGGTCTCGT GTGGGCTGCC AATATGAGCA GTTCTCTGC AGGCAGCAAG GATACTCCGA GCTACCAGTC CATGACTAGC
 CTCCACAGCA GCTTCTGAGT CCATTGACCT CCCCCTCAGC CATCATGGCT CCTTTGINTT GGACTGACCA CAGGCACTCA
 CG

SEQ ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGTCTGT GATTGTNAAG ACTCACAACC ATGTGGAGAG GCGAATCAC GCAGGAGAGC CAGGCATTGG AGTACCCCTGG
 CTCCCAECCC CTTCGCCACC CGTINTTGAG CCAGAGAGCT ACAAGCAGGA ATCCAGTG CAGCTGCAAAT NATGGCCATC
 GAGGAAGTCT GTGGAGAAGA GGCTGGGGGC TGTGGTGCTG AGGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT
 CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

SEQ ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGTTT TGGAGCTCGA NATCTTCATG GGTTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG
 TNCCCTCTCT GGCTGTGCA GAATGTAAAC AGCAGACTCA TACTCAATGG GCACTACAGG CCTTATCAGA CGTTTTATAC
 AAGCTGGAT TGCTTAGTAG GGAATAAGG CATTCTCTGA GGGGGCTTTC CACTTAGATT GAGAAITTTA TTTGAAAAGA
 ATCTGGTTTA AATGGCATTG TGCTCCGAGG TAGCTGCTCT CCCCAGTGA AGCTGAGCCG AAATATAAGA ATAATATATT
 T

SEQ ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TTTGCCGTCT TINATCTGCC AGTGACCTGA ACCACGAGA TTTTCAAGC AGGAGGGCCG ATTGGGCAAC
 CACAGCTCCC GTGCTCTCTC TTTGCAGTGC GCGGCTTTC CTCCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC
 TGCTCGTCCA GCGTGCTGGC CGCCGTGGTC TTGAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCG TGGCGGTGAG
 ACGTCCGGCC GGG

SEQ ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGTA CTGGGATGTC ACTGTGGAA AGTGCTCACA ATTTCTCATC TAAGCCGAAG TTGTCTGTNC TCCTTCTTAC
 CTTAAGAT TCTCACTGCC TGAAGGCAGC TGCCAAAACC CCTCTAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA
 CTC

SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCTT GAGGGAAAGT GGTAGAGTTA AAGAGGGCAT AGAGAGCGCA CTCATGCATT TACAACCTCAG AATTTTAAAA
 AAAGTTTACA TTTTGTCAIT TGTACTTCAG ATGAATTTNC TTATTAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT

271

CCTGTTTCCC AATGCCTACC CTCCTTCTTC TCCTTTCTTC TTCTCTTTTC CTAGAGAAAT CCTGCCTTCC TTTCCCTTCC
CAGAGGCAAC TGGCATTATA AT

SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)

GGAAAGAGGA GCAGGCTGGA AGGTTTGTTG AACCAGTCC CCTGCAGAAT CTGTAAAACC TAATAAATCA TGGTTGTGGC
CATTCTCAGC GTGGTGATTG TAATTAGACG ACCCCCGGGA AGCCAGACA CTCGGGGCCT GGAGTTCTTC CCCCTGCCTG
ACCTAGAAGC AGAACCGTTT TCAGCGNICT GCGCTGTTGG CTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC
GGGTTTATT TCTCTCTTC TTGAGTG

SEQ ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCTAAA CACTTCTTC CTGAGATGTT AAGCAAAGTA ATCATCCTGT CACTAGATAG AAGCGATGAA GATAAAGAAA
AAGCAAGTNC TTGATCAGT TTAATCAAAC AGGAAGGGAT AGCCACAAGT GACAACITCA TGCAGGCTTT CTGAATGTN
TTGGACCACT GTCCCAAAT GGAGGTTGAC ATCCCTTTGG TGAAATCCTA TTTNGCACAG TTTGCAGCTC GTGCCATCAT
TTCAGAGCTN GGTGAGCATT TCAGAACTAG CTCAACC

SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTTAGGTCAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCCAAGGC TATGATCTTT GINCTGCGCC
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTGCTGGC AGAGTTTATA CTTTGATAAC TGAACCTTAG
AGTAAGCCTG CCCTGGGAAA TNCAGCTCA AGGGACTGAC AGGCATAATG CTCCTTGGGA GAGAAATGCC ACATCTGCAG
CGACACGNAT CCTTAACACT GTCCAGGAC T

SEQ ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTTTNCAG ATATGGATAA AAATTGCTTA GGAGAGTAAA GAGAGACAAA GTTGAAAGCA GTTTATAGT AGGTGTTGTT
TTAGTGTTGA TCCCTTTTTG CTCCAATAAT CAAAGTGATA AATATGAAA ATTGATTCAT GCAGCATTAC TTAATCCATT
CTAATTTTNA TATATGTCAA AAGTGCCATC TCCCAAAGTG TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT
AAGGTTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATTCTTAA TGCAAATAAC AACTCTTTTG
GGAAGTAACC CCGTTT

SEQ ID NO:1007: (Length of Sequence = 355 Nucleotides)

GGCAAGAAGS CGTGGGCGGC GCANTGCGGA TCCAGAAGGA CATAAACGGC AGCTTGTTCC TCCAGGCTGG TGGGCTTNGT
GCCCTGGGCC TTGGGATGCT TATCACAGTC CTTTGGGACC AGAACACTGG ATATCAGTNC AGCCTCTGGG CCAGCTTCAG
AGGCTGTTAG AGCATCATG CTGCTGTGGC TGATGCTTCC TTCTCTCAGT AAATCACAAA AGTGTGTGTG GCCATCCAGG
TTACCGAGTG ACTTAATTTT CAGAAAATTT AATATGAGG TCATTATTGT ATGCATTTTC ACTGTGCGCA TTTTGTATC
CTGTAGGTA GGTCTATGAA GTACCACTGG GTCA

SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTTAAAG AGAGCTTTGG TCAGTAAAAG TATAAANCT GAGCTTTGGT AAGGGTACAG TTTATAAGGC CTAGAGAACA
TCAAACATT CATTTTATAT TGAATGTATA AATACCCACA TGTGAGAGCA CATGTTGATT CAGTTTGAGT ATGCTGCCT
TGTGNTCTT TAAAACCTTT CCAGCCTGGG TTATTTTCCC AAGCTTTCTT TATAATTACA CCAGGGAAAG AGTTACNGG
NATTAATCAA AACCAGACAG TGGACAATG

SEQ ID NO:1009: (Length of Sequence = 295 Nucleotides)

272

GATAGCAGCA ACATACGTTT GTTATTTCAT TTGCTTACTT ACAACAAACG TTTATTCAIT ATTTATAATG CAACAAGCAT
 TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TTTCTTTCCT CAAGGAAATC ACAGTCTGTT GGCAGAGATA
 AGTAGTAATG GTGCCTAATA TAGGTAACAC TTGCTACCTG CTCCAAGAAC AAAGTTAAGC AAGTGATTAA GTTAAGCAAT
 GCTTAGAGGT AGAGGATGTA AGANTGGCCT TAAAAAATGT GTCTTCTGAG ATGAG

SEQ ID NO:1010: (Length of Sequence = 356 Nucleotides)

GIATTTCCTC ATTTGTGCAA ATNAAATAGA AAAGGTAAAT NAGAAACTCA AGAGGTTTGT TACCTACTGT CAATGGAGTG
 GGGAAAATGG GTGGAAAGAA GAAGGCAATA AGAAAAGAGT AACAGGAAAC GACAGTNGAC ACTTCTGAGT ATACCTTGTG
 GAATCTCTTT CACTCTTAGA ATCATAGTAA TAGANGANGA AAAAAGAACT CCCCAACTG AAAAGGATAG ACCACTGGAA
 CAACCTCAAG TGGTCTAATG TAGAAGCAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTTT TGAAAAGAAA AAAACATTTG
 AAGAGTTAAC AGCGAAACAC TTTCCAACT TAAAGG

SEQ ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCAGCT GGAGACAGTC AGGAAGGACT
 GAGGGAGAGG GGACAGCCAG GGCTCCACAC CCAGGCAAGA ATGGGGGAGG GCCTGTGGAA CAGAGAAGTC ATCAACACAC
 ACAGTTCAA GTCTACCTTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCTT GGNAGCTCCC
 TGTGGGCTC TNCCTGCCCC TGCTGGCTCC CNCTGCGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

SEQ ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCTA TAGCCCTAGT CAACCACTAA TCTATACCTT GTNCTCTATA GATTGCGCTA GTCTAGAAAT TTGTATATAA
 TGAAATGCAT GCACTTGAAC TTTTGTATC TGGCTTGCTT TTCCATTTAG CATAAAGTTT TAAAGGTCCN CATATGTTGC
 TGCATGTGTG CATTTCTTTT TGTGNACTGC NATATTACAT TGTATGGGAT ATACCAITTT GCCATATTTN GTTAAATCCA
 TTCATCCAGT TGGTGGGACA GCAGGTTATT TC

SEQ ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTAGTG TTTTCTACAC TACTCTCAAG TTCATTGAGC ATGTCAITTC AACAACTGT GACGTGTCAA CTTCAAAAAT
 TAAACAAACC AGCNAACAC AACACTTGNC ACTACAAAGG AACTTGTITT ATTCTCAACC TTCTATGATA GCTAACTTC
 TCTGNAATTT NGTTCGCCCA CACATCCAC ATCTGGGCTC AATTTCCAGC TTCTGTINIT CTGTTTTATT TCATCCAAAA
 TGTATTTTAA AT

SEQ ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGCGCCA CACTGCGAGA TTTCAGGCCC AGCAGGTCCT GGNCAAGTGC CATTCACCCC
 GGAACCTTTA ACCCAAGCGG TGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTTCTGGG CCATGACACT
 TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCACG

SEQ ID NO:1015: (Length of Sequence = 222 Nucleotides)

GGNAAGAAAG GTTCTCAGA GGACAGCCTT ATTAATTTCT CAGAGGATGA ATTTGNACAA TGGCAGCAGG TTGCAGTCAC
 AACTTCTTAA GGTGCTTCAG AGGCTGATTG TTCTAGNAA CACAGAGTAA TGAACATTC CTGAAGAGCA ATGAAACAGG
 TTTTGAATTT TTTGTATCT GNACTTAGNA ACACATCAGT CCCCATCAAC CCATGGACTT CT

SEQ ID NO:1016: (Length of Sequence = 236 Nucleotides)

273

GAATAAACTG GTTTGGAACC AGAAAAGTAC AAAAAAGAAC AGCTAGAGGT ACATAGACAC AGGACAATTA ATCAATTTGG
GAAAAAAGAA AGNACTTACT TTCTCCATTG CTGCCTGAAT TGTITCCCAA TCTGCCTTGA AATGCCACTT TTGGCCAATA
TTTTINCAA AATTTGACCA AAAAAGAAAA AGCACTNAAT TTCCCTTTTT ATACAAAAAT GNTTAAGTAG GCAAGT

SEQ ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTTTCCCT AATTTGGAC CTATGTGGAC AAAAAAATA ATCTAGTCCA AGCTTTCCT ACCTTCTTTT
TTTATCGCC TTCTGCTTCT GNGTCCACA TGGGAACCTG AAGTGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA
ATGAATTTNC TGATTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAANGT GTTNAGGAAT
GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTTT ATGAATCAGC TAAAAAATA TGATGACGAC ATTTCCCAT CCGAGGACAA
AGACACTGAT TCTACCAAG AGCCTCTGGA TGACCTTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC
AGCACAGCAG TGCAGCCGCG GCTNCCAGC AGGGCGGCTA CGAGATCCCC GCGCGCTGC GGACGCTCCA CAACCTGGTG
ATCCAGTACG NCTCGCAGGG GCGCTACGAG GTAGCTGTGC CCCININCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC
AGGACACGAC CCACCCGAC GTGGCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TTGGCCATGG AAGACTTATC TTCATGGCAC AGAGAGNYTG TSCAGAGATG AGTCAGACTC AGGGGCTGAG
TAACAGCAGA GCAGAGAGTG CAGAAGTGGG CGCTCAGAAG CGAGTTTATG TGTGTYTTTY CCTCIATCTG CTGGCTGTGG
CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTAGATCT GGCAAACTCT CTCTGCACAT
AAACTGTTA TCTTAGTTC TCTGAAAGAC CCCCATCT TGAAGTGT AACTAAGAGC TACATTTTCC CTTTACTAC
ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CTGAGGAAGA GAGGTGAAGT GGCATCTACC CAAACACCT GTGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC
TTGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGTNACCACT GTGAATTAA TTTNCTTTAT
ATATAATAAA TAGCTGTGCT TACACATTT CAGATTNCT TTGTAGCTA TGGACATGGA ACAGCGGGAC TATGATTCTA
GAACAGCACT CCATGTAGCT GCTGCAGAGG GTAATACAGG AACTACTCCT ATCTATTTCC TTTCCAGATT TAATTTCTAC
TTAGTACTAA AATCTGCTCT TTTTTTGGGG GTGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC
TGC

SEQ ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GGCAGGGGTG TGGGGTTTGC TGGGGGCCTC TGTGGGGCCA TGATCTGAGG AGGGTATGTG GGGGGCGGGA
GCTCAGCACA TTCCATGGCC TAGAGGGGOC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT
KTGGGGAGAT CCCAGGGTGG TCTGGGGCCT GGAACCGGCC ATTKGGAGGC CCCAGCAGTT TCAKTGCCCC GGGCCTCCCT
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACACGCC CATGCCCATC AAGAAAGGCA GTGTGGTCAT
GCGTKTGGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCAGAT GATATCAACG GCTTCCTGAA
GAGAGACCCG GGCAATAACA TCCATTCAAT TGGGAGAGGA GGTGAGGGAT NT

SEQ ID NO:1022: (Length of Sequence = 413 Nucleotides)

AGCAACAGAA GAAAGGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TTTCAGGGC
 TCAGGAGACT GGAAATTTT NCCAGGAGCT AGGAACGAGG GGTGGGAGA CGTTGGTCAA AGGGTACAAA GTCCAGTTA
 TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA
 AATTTCCTAA CAGAAGAGAT CTTAAGTGT CTCATAACAC ACAAACATA GCAACTGTAT GAGGTGATGG GTATATTAAT
 TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCCANCA
 TTTTGGGGA GCT

SEQ ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCTCA AAACITTTAA AGACAGTAGA TATTGTGGT TTTCTAGCTA AATGAGGGCC AAGATTGGNC TTTTCAACT
 AAATTGAATC ATGTAGTATA TCTGATTTC TAGCTTTCTG GGGGAAAGG GAGGATTGA ATTAGCAGCA GTGCAGGTCA
 GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC
 CTGCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAT AGGAATCGTC AAATAGTTCA AATTATCCGG
 GGGAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

SEQ ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGTCTACAGG AACAAAGAAA TCTAAGATGG CTGCTCAGCC TTGAAATGTA CATGTTTTGC AGCAAGTTG TTGAAGAACC
 TTCCGTGGC ACAGATTGTC CTTTTTACA AGCATACAGA AGCCTCCTTC CGCCAGGNC TCTCCGTTG CATCCTTGCA
 AATGGCTCCC ATTTGACACA TTCTAAGTC TAAGAGATA CCACTAGGGC AGCTTGTACA GTTCTGAAT CCTGGGCCAT
 TGCACGTCAA ACAACTGATA TCACATTTTT TTGCAGGATT TGTATCCATT CTCTGAAGAG TGGTCAAAGT AATAGCTGAT

SEQ ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTTAATCA TTCTTTCTT TGCCGAAGA CTAAAACTA AGAAGATTAT TCGAATGGTG AATTAACCTG TTGAAGAGAC
 TATTCAAAG GGATAGAATG AGACTAATTY CTGACTATGT TTTGCTAGTG ATGGGTGGAT GGGAACAAAC ATTACAAGAA
 ATAGCATAAT GAATGTAGAA AATATTTTCTG TTTGGAGATG TGCATGANTT AGTTTCTAG GTTTGCCACA ACAAGCATC
 CCAAAGTGT GGCITAAAA ACAGAAATTT GTTTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC
 CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTTTNCCT

SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGTGCAGGTG CATACAGGAA GGACCATGTG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGGCTCCA
 GGGACCCCAA TCTGTCTGGC ACCTAGGCTT TGANTTTCCA GCCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC
 CCCAGCAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA
 GAGGAAAGAG ACGTGTCTAG ATCTGTCTCT NCTGGACATC CGATCCCAGG CTGTCTCTTC AGTGGGNCCA AGTCCAACTA
 GCAGTCAGCT CAGAAATAAT CCTNAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAA

SEQ ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGSCA CCTAGAAGCA GCCAGGAGG AAGTACTGAC CATTTAAAG TGGCAGATCT CCGGGCCCA TTTCTGCAGC
 CTTCAATCTG CAACTCCAGG GAGGGTATTT TTATTTTGTG GGTTCAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAA
 TTGTGTGTA AGTAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTG TAAAACCAT TGGATTTTT TAAAACAAA
 GTATTAATAA TCTGGAAGAC AGINTTGGCC AGGTGAGGAG TGTTTTCTTG GTGGTTCCAG CCCCCATCA TTGAAGTGT
 TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGG GCTTTCCAC CTGTGGGGGA GGGCAGATT
 AGGATGTTTT T

275

SEQ ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCTCAACT TTCTGTTGGA TTCCATGCTA AGCAAGCTAA CCTTATCCTG CATTGTTAGC ACTAGGCACC
 CAGCTGCCAC CTCTCCATCC TGCTGCCCTT AGGCCACATG GGAGCAGTCC ATGCATGACA GCCTCTATCC TACAAGGCCT
 ATGAGTATGG ATTGGGGGGG CCAAAAGGAA AAAGCTCCAT GTGCCTCTTT GTCTGCGTGG GTCAGAAGAG TTGTGCAAGC
 AGATTAGCAG GCCAAGGTCT GAGCCACAGC AGCATTTTTA TTTCAGATTT TGATAACTGT TTATATGTGT TGAAACCAAA
 NTGNCATCTT TTTAAAGCTT ATCCATAAAA AAAAATAGAT GTCTTTTATA GTGGGAAAAC ACATGGGGGA AAAAATCATC
 TATTTTIGATG CAGCATTGTA TAATGNTTAA ACACCTCACA CCTCACTCTT

450

GAAAAATGCC AATTGGATGC CCTTAGGTGG AGGTGAGAAA ATGGCATCCT TGCCCTCTTC TCAATATGAA ACATTAACTA
 GTTGACAAAT TTATCCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGATCATTA
 CAAAATTCTG CTTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTGT TAACCACATT CCAAAATGTG
 GAACATTTCT TTTAGAAATG AAAATATTTT AAGGCTGATG TATTTTAAAG CTACACATTA TCAGGGNCAT ACATTGAGAG
 TTGCTTAAT TAAAGGTGT TGGGCATCAA ATTATGTTA GTAGGTACT ATTCTTAAC AACTCAAGG TGCTTAAATG
 G

SEQ ID NO:1030: (Length of Sequence = 340 Nucleotides)

TTCCCGCTTG ATTCCAAGAA CCTCTTCGAT TTTAATTTIN ATTTTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC
 CATGGAGTCT CGGGTCTTAC TGAGAACATT CTGTTTGANC TTGGTCTCG GAGCAGTTG GGGGCTTGGT GTGGACCCCTT
 CCTACAGAT TGACGTCTTA ACAGAGTTAG AACTTGGGGA GTCCACGACC GGAGTGGTC AGGTCCCGGG GCTGCATAAT
 GGGACGAAAG CCTTINTCTT TCAAGATACT CCCAGAAGCA TAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA
 GCTTGAGAAA TAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG GNTCCCAAGG GACGGGCTGG CAGCCGGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC
 TCTCATTAGC AGAATGIGGG CACCTGCACC CAGGGCCCAT ACCACGTCCC TGTGAGCAAA AAAGCTTAAA GTTCTCCCTC
 CAGGCCCAGG GCCAAGAGCG CCTCACAAAG GGCTGCTGCC TTGAACTTGG CCTGGGGAAA TNAGACCCTG AGCGGACCAC
 AGCCCTTGAG CCTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA
 GCACAAGAAC TGCAAAIATC GTCTNGGNCAG GAGCCACCAG AGGCCTTAGG CTCTTAGGA CACCGATATC CCCCATTAT
 GGGGTINGGA GGGAGTGGCT TTTTITAGGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCTACAG AAACATAAAT TATACTGAGT TGTGCTGTAC TGGTTTGTGA GAACATCAGT GTATTAAGGA GAATGGTAGT
 TTAATTTGAA TATTTAAAGA AAGTAAATTG AATGGTTCTA GTACTAGGGC CATTATTAAC TAGTAACATA GATTAGTGAC
 TTCAACTGGG TGTCTTAT ATCTGATTG TCTGAAGTGA AAACGTGTA GGTGCTCTTT TAAATGTAT TTGGAAACAC
 CATAGTTAGG GTAAATNCA TGTCACAATT CACTCTGCA TATTATTNC TTAGCCAAAT TTATGAATTC TAAGTTAGGC
 CAAATTGAAG GTTGGAGTT TTACATTGTG GNGAGTCTA AATTCATGCG TTTGGCAAGC ACCAAGGNC TGGGGAAAGA
 ATCTGGTATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

276

AGTGGCTTAC AAAACACAAA TTTATTATCT TACCATCTCG TGAGTCAAAA TTCCAAAATA GGTGTCACTA GGCTAAAATG
 AAGGACTGCA TTININCCTG CAGGCTCCAG GAGAGATCTA TGCTTACTC TTINCGGCTT CTAAAGGCTG CCCACATTCC
 TCGACTAGTG GCGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTTG AGTCTCATG TCACATCTTT NTTACCTTTC
 TGTACATCTA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTTTAAG GGCTATCATG ATTAGACTAT GCCCACTAGA
 TAATACAAGA TCTCAGATCC CTTAACTTCC ATCACATCTG CAAAAGTCCG TT

SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

CGCGCCGCGA CGGACGCCCT CAACCGGCAA ATCCGCGAGG AGGTGGCGAG TGCAGTGAGC AGCTCCTACA GGAATGANIT
 CAGGGCATGG ACGGACATCA AGCCTGTNAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC
 ATGAGACCAG CTACAGTCT CAGTTCAAAG GAGAGGCCAG CAAGCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA
 AGAWTACGCA GCCTCTACAG CGAACCCCTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KTTTCAGAGTT TCAAACCAAA

SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TTTTTTTTTT TCAGTGGAAA ATAACITTNA TTGAGACCCC ACCAAGTCCA AAANCTGTNC CTGGCATTAA GCTCCTTCIN
 CCTTTGCAAT TCGGTCTTTC TTCAGTGGTC CCATGAATGC TTCTNCTCC TCCATGGTCT GGAAGCGGCC ATGGCCAAAC
 TTGGAGGTGG TGTCAATGAA CTTAAGGTCA ATCTTCTCCA GAGCCCGCCG CTTCGTCTGC ACCAGCAAGG ACTTGCGGAG
 GGTGAGCACC CGCTTCTTGG TTCCACCAC ACAGCCTTTC AGCATGACAA AGTCATTGGT CACTTCACCA TAGTGGACAA
 AGCCACCCAG AGGGTTGATG CTCTTGTMAG ATAGGTCATA GTCAGTGGAG GCATT

SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CCTATGTCT TCTCTTTTT GCTTCTCTC AAGTAGAG : TGACTTTTT GAAGTTAGC TTCTTCTAAG AGTTGCATGC
 TATTNCTGGC TCTTACAATA GCTCATATC TCTNATTINC TAATTCATT CACTTTGCTT GTAGCTCTCT GGTCTGTTTT
 TCCAGATGTG TATTNCGGN TCTNAATTGG TTGGCTTCTT GGATGTGCAC ACATAATCTT ATTTCTAATT GTTTTATACT
 AGACTGTAAAC TGCTGTAAAC GGCTATCTGA TGCTTCTCT CTTCATGGG CAGACACCAC ATCC

SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTTTATAGC AGTACTTCCC ATTAAAGTGA ATAACCAAAA TCACTTTAAG GTCAAGATCT
 TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCTTTT GCAACCTTTT AAACCTATGA
 TGAAAAACAT TAATGTCAGC TCTAAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT
 TTANCAATTA CCTAAGTTG CTGACACAGA NTAATATTAA TAAATAATAC TGATCANNGN AAAGTAATCA ATTTGAAAGT
 GGTGGGGGTA GAAGSACAAC A

SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

GGAGGCTGAG GTGAGAGGNT CCCTTGGGCC CAGGAAGTCA AGGTGTCAGC AAACAGTGAT TGCACCACTA CACTCCAGCC
 TGGSCAACAC AGCAAGATCC TGTCTCAAAA AAAAAAAAAA ATATCAGTAT TGTTTTATTA ATTGTAACAA ACACACTAAA
 TAAATGTAAG ATGCCAACAC TAGGGGAAT AGGATNTGGN GTAAATGGGA ACTCTCTGNA TCATTTTTC AACITTCCTG
 TACATCTTAA ACTATTTTAA ATGNTTCTAC AAAAGTTAAC A

SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGAAGCA GCCCAATCTG CAGGAGTGGGA ACCATGGCCT TCATGATGGA
 CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGGCAG GTCAGGAAGC AACGTGGGCA GGTAGGGCA AGGAATTTNG

277

TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGACAG CAAGGTGCTA AGCAGTNAGT GCTTTCAAGG GCAAAGGTTA
GAGCTG

SEQ ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGTCAAGA AGAGCTTAAG AAAATATAGG AGATACTACA GCATGTTTGG TTCATGACCG GAATGATTTA GTAAGAAGGA
AAAGCCAATA ATGTAAGAAA GGGGATTGCA GGAGCAAAGA CTTTAAGGAA TAAAAAGNC AAAATTGTTT GTTCTCAGG
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCCAG CTTTATAGCTT CAGTCTGCC TGACATTTAT TGGTCATGTG
GCTCTGGGTG TATTCTCACT TCTCTCCCT AAATAGCAAG AAGGAAAAGC CTCITGGAGC CTCGTGTCTC TGCTTCTTTC
TGTACAATGG TTATGTTTCT GNTCCGCTTA GCTGGTTAAT TATAGAATCA CCTTNGCTGG GGTCTTTTGG GGACTGGCC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAACAG TCCGTCACG ACAATGTTG TTACGCAGCA CATTATATGC AGTGTGTGAC CATACACGAT ACACAGAGGA
AATTCAAGGC TTCTAGGAAA CCTTCTAAGG CCTCATCTCC CTAAGGGCAC CTGATGAGCC ATTCTCACC CTGCACTGC
ACCAGNCTC CAACACCACC ACCAAGGCTA ACCGCTGTGC ACTCTGGGCC CTGGGTCTGC AGTACCTGGC TCCCAAGCAC
ACCAGCATCT GAAAACTTGN CATCCTTGCC GATNTTNGG GGAGTATTGG TTGATTGCAG TGACAAATCG GCAGAAGTTC
CGGG

SEQ ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTTCT CAGAGATGAC ACTGCCAACA ATCAGAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTAC
AGTAGTGT TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGTAAACAA TENGCTACTG CCATTGGGN TTTTTACAT
GNCCTTAGCT TAAAGAACTG GTCTTAGCA AATATTCAAC AGTCAACCT GA

SEQ ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTTGGAGAA AGAAAAATTA GAGAATTCCA GATCCTTAGA ATGCAGATCA GATCCAGAAT CTCCTATCAA AAAAAAAGT
TTATCTCTTA CTCTAAACT TGGATACTCA TATAGTAGAG ATCTAGACCT TGCTAAGAAA AAACATGCTT CCTGAGGCA
GACGGAGCTA TTCCAGATGC TGATAGANCC ACTTTAAATC ATGCAGATCA TTTTATCAA ANTAGTNCAG CAGCAAGATG
AAGAGCGAGC TCGGCAGCTG AGAGAGAGAG CTCGTGAGCT AATAGCAGAN GCTCGATCTG GAGTAAAGAT NTCAGAACTT
CCCAGCTAT

SEQ ID NO:1044: (Length of Sequence = 285 Nucleotides)

GTGAAGCTG TTTNATTTT ACACCTTCT GTTTTAAAC ATAGGGACTG ACAGGGAGAC CCAGGGCTGC AATCTGGGTG
GTGCTACATT TGTAGACAAG GACAACTTGC TGTATTTTAA CCCAGAAACA TTAGAAAGTT TGTCTTGAA CTCTGGCTC
AGATTAGAT GCATCTTGA AGTCTGATA TTGGCTTAT CTGAAGCTTT GGGATTATCA TTNCTAGTT ATGAAGGGAA
TGAAAGTGT CATAACATTT TTGCAGGTGG AAGGTAAAGT TGTTG

SEQ ID NO:1045: (Length of Sequence = 317 Nucleotides)

TCGGTACTG TAGTATTGTA GTATAGTTT AAGTCAGCTA GTGTATGCC TCCAGCTTG TNCITTTTGC TCAGGATTGT
CTGGCTATA CAGGTCTTC TTGATCCCA TATGAAATTT AAGTAGITT TTNCIAATC TGTGAAGAAT GTCAATGGTA
GTTTCATGGG TATAGTATTG AATCTATAAA TNATTTTGG CAGTACGGNC ATTTTCATGA TATTGATTCT NCCTATCCAT
GATGATGGAA TCTTTTCCA TTGTTTGGG NCTTCTCTA TTTCTTGAG CAGTGGGTT GTAGTTCTG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotides)

278

CCAGGTGCAA TCTCGGCTCA CTGCGACCTC TGCCTCCGCG TAGTGGGACT CCAGCTGTGC ACCACCCAGT CAGCCCCACG
 CCCACCCTGC CAGGCGTGTG CACGCTTCAG CGTCACTTTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC
 CTGACACAGG CCAGGCGAGG GNCCACCTC ATGGGCTGTG CTGCAGCCTC TGCCTCGTGG GTCACGGCAC CCCATCTACG
 AGGNGCCCCCT CAAGGATGCG CCGTCGAGTN CCCGGGGCCC TTGGCATGTN CTTGSCAGAG AAGGCAGCTC AGGGGT

SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCTCAAAA CTGGGTTC AGCTGGGTCT CAACTCAGG CTCCAAGTGG GTCTCAAACT CGGGCTCCAC CTGGTCCCA
 AACTCGGGCT CCACCTGGT CCCAACTCT GTCACCACCT CTTTNTAGGT CTCANICTCC GACTCTCCC AGCCAGCGGT
 GGTGGCGGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTNGTG GCAGGGCAG GGGGCAGCGT GGGAGGCACA
 GTGNGGGGG CCTAGGGTG T

SEQ ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAAG AGAATGGAGS CCACATACAA TGGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA
 CACCTCCTGA TTCACAGTTC AGTATTTTCG GCCACTTTAC TCAAATATTT TTATAAATTA TTTTAAATC GGCAAAATAT
 TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TINGGGGAAA ATATCTCTAAT
 TTTTAAAC AGAAAAAGCT AGGNNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA
 ATAGGGTTGA TTCAACTATT ACCTTCTCCT AGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

SEQ ID NO:1049: (Length of Sequence = 335 Nucleotides)

AACTCACAA GTAAAATAAT GCATATTTAA GGGAAATATT ATACAGACTT TTTCACACAG AAGTACATAA TANGATTTTT
 TAAAATCTAT TGCCATTCAT TTATTTTTCG ACAAACCGT ATAAATATGT CACCAGCTTT NCTTAACCTA AAAAATTA
 ATAAAGACA CCAGATGAAA ACTACCTTT GCTGCCATTT TTTTAAAGT TTTTGTAG GGGTTTTTA TTTTGGNGT
 TTTTINCTT TTNCTGCTTA GAATGGGTT TCTAGGGAAG AAAAGCCCCT GCATTAAAA CAGNCCATTT AAAAAAAAAA
 TTCAAAGTTC TGGAT

SEQ ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGGAAAATA TGCAAGATAA ATTAAATNCT TAGTTAAAA AAAAAAAAAAG TTTCACCAAC
 TGINTCCAT TACTGAGAAG CCCCCACTT GCCCCACTGT GCATATTCCT AGTATTCAT CCATGTCCTG CTCGTCTGTG
 CTGCCCTACA AAAANCCCT CCCGGGGGGG AAAAAAANC AAAAAANCGG TGTAGTGTA ACTGCTGAAG AACTTAAATG
 TTCAAGNGCA TCTTTAAAGT CTAGG

SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTTCTAAAA TGCTCTCAA TACTAATATT ATACATTCTC CCATTTATCC TCAAAAAACC CATGAGACTG GTGATGTAAT
 TNCGTGTTC ATTTACAGC TGTGGCAGT AGTCTAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA
 GAGCTAAGGC TTAACCCAG AATTAAAAA TTTTTTNAG CTCTNGTTT TTNCCATTAT ACCAGTTTGG CCTTCATTT
 TATTCATGGG TTAAATTAAT TTATGGTAAC AAAGGGCCCC TGGTCACTTT GGACATTT

SEQ ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAAACG TGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAAT GAGAATTCTG TCCAGAATTG
 GTTCTTCCG GTGGGTTCCT GTCTCGCTG ACTTCAAAA TGAAAGCCAT GAACCTCGT GGTGAGTGT AACAGTTCCT
 TCAAAGATGG TGTGTCCGA GTTNTTCCC TNCAGAAAG TTCAAATGT TATCCCAAGT TTCTTCCCTT CTGGTGGGT

CGTGGTCTTG CCTGATNTC AGGAGTGGGA GCCGAGAAC CTTTGCTGT GAAGTGTAA CAGNNTCTTT AAAAGGTGGG
TGGCATCTGG GAGTTTGTTC CATTTCTCC CCAGTGGG

SEQ ID NO:1053: (Length of Sequence = 195 Nucleotides)

GTGCAAAAT TGTATCCCA GTGTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGAAGGTGG ATCCCTCATG
AAATAGATTA ATGGCCCTCC CTCCAGGGT AAGTGAAT NCTCAGCTG TTAAGTCCC ACTGCAAGAA GGTGGTTGAC
CAAAAGAAG CCNCGTGCCT CCCCCTAACC CTGA

SEQ ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGTTCTCAC AAGAGCCCT GCTTGAGAT CACTTACATA GTTTTGGGG AAGCCAAGAT CGAAGATTTA
TCCCAGCAAG TCACAACTAG CAGCTGCTGC AGAAATCAA AGTTCAAGGT GCAAGCTGTC TCAACATTG CAAGCAAAAC
ACACAGTACT TCCAAGTGT ACAAGAGGAG GAGTGCAAGA GGAAGAGGT CGCTGAAACA GGTGTTAGTA AGTTNAAGGT
ACATAGANTT GGTTCATGTT CACAAGCAA TGTGTTGAG GGNCAAGGN CAGTCCGAG CCTGTAGT AACACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAAA GAATCAATGA AACAAAAAT TAATTTTTTG AAAAACTAA ATTGATAGCA
CTAGCTAGAC TAACCAGCAA AAAAGNTAG CAAGTACCTA AATGAAANC TGAATGNA AAAAGGAGGA CATTTACAA
TNAACACAGG AAATACAAA GTTCCATGCA GCGAATTAT TCAG

SEQ ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAATTAA TGATTTCTGC TTCACCAGAT TGGTAGAATG TATAAGATGG TGCATGGGA AGCATTTAAT ACCCAACAAT
ATCTGATTAC ATTGAAATCA CAATGSCCTC CCTATCAAT VAGTAGCGTT ACTGTTTGAG CCTGVAAAAC TTTGAAATA
ACTTG

SEQ ID NO:1057: (Length of Sequence = 203 Nucleotides)

CTTTCATTCA AAACCCATCA CAGAAATGGA CAGCTGGGT CTGTAACAA GCATTCAAT TTTAGAGCAT AGGTCAGTAA
TTGTATATGA GAGCATACAC TGGCTACATA CAATTAAT GTTCAGNCC ACACTTTTIN CAATGTTTAA AACAGGATNA
AGCCTTCCCT GTGAAAGCA GCACCTTGT GAACGGTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGTGCAATAT GCACATTACT AAGCACAAA ACAAGTGT ATTGAGAACT ACTTGCAAT TTTTATGTTA AATGCCAATG
AATTATTATG CCTTAGTTTT ATGAACCTGN CTNCTCTG TGCAATTCCT TCCTTGCAA TGAATTGACT TNAACGCGT
NAGTGAATAG CCTCAGNCTG TAGGATGTCC TTCAAATTT T

SEQ ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCCACTGGC TACATACATG TTTTCCAAAT TAAGTTTCT GATGGCTCAT CATTTGCCAT CTCTTCAAAT CCAGGTCTT
TTAAAAATCT ATGACCTTGG AATGAATGTG CCAGAATACC TGTATCTGG AAGTCCATGC GAATNITGGC NTCGACTGCC
ATCCGCCATC TGCTGG

SEQ ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAAGCA GTGTACAGT ATTACAGTCA GCCACAGAAG CTGTGTGGG GGACAAGACC CAATCCTTCC CCACACCAGG
CAAAGCAGTA TTGGACATGA GTTGGCATGT GGCTGGGCC ACGTCTTAT CCCCAGGNC CTGNGGGGAG ACCACCTTTC

280

TGAATGGTTA ACCAACCCTT AGGCTACCAC TCTGTATTTC ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA
ACCCCTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEQ ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTA CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA
TCAGCGTACA GCAAAGTGGG TGTTCCCATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTCAG

SEQ ID NO:1062: (Length of Sequence = 316 Nucleotides)

TTNCCCTCAC AGAGTTTTAG TTAGAATCAC TTTCTCTATT TCCACAAATC CTTCTTTTCT TTCCTTTTAT TTTCTAAAGT
GAATGTCCAA GCAAAAAGGA AGCAAAAATG GTCAAAGATC TCTCTTACAA TATAGTAATA AATTATNCA AACAACTTGG
AATTCACCCT GTGCATTGAA AATNCAACTC CAACTGCAA ATTATGGCAT TTTTCCCN CCAAAGSAAT TAGTGAATC
CATGGATGC ATTCATACTN CTGTTTAGGN AATAAGGGAA ACCGCTTGT AAAAGTNCAA CATGGCCTAG GAGTTA

SEQ ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCTGGT TTATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG
AGTATTCCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGGC CTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC
TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGNGG AACACGCCT ATTAATACCC AGCACTTINT GGAGGTGCAG
GGAGTTNCGA GTACCAGTCC TGGGCCAACA CGCNTGGAAA TCCTGTTGAA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length of Sequence = 322 Nucleotides)

GAAAGCATTT GAACCTAAGT TGTAAAAATG GCAGATAATA ATTAACACTT GGTAGCAAGA AACGCTTTCT GAAATACTGG
GAACACTGAC TTGTTTCACT GTAACTTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA
CATGGGTGTT CCATTTCTAT TTGGATAAAA TTTACTGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAG
GCTCTGGCAC TAAATTCAC TCTACTTAAC TTAGTTTACT AATTAACCTC CTTAATTATA GTTTTCCAA TCCGATGCA
CG

SEQ ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTGNCAAC TCCTTGCAAT GACTGATGCT GGAACCTGGG TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTTAGC
AGGCTACCA CAAGTTCTAA AGGGCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTTNTG
GGATCCTGAC TGTCCCAGGT TACAAGTTCC TGGCCACTCT GTGAACCTTG GGCAAGTTAA CTTCCAACCT CTTTACAAGT
TCCCTAATCT ATNAGGAAAC ANTITAGTAC ATGACCTTCA TGGGAATTTA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTCAGAGCA GCCAGTCTCT CCTGACTGCT TCCACAGGAA GAGCCATCAA CAAAGCCAAT CCCTGGAGAT
AGGCTCTGAA ACCAGGATAG AGACTCCTTC AATGGCTGCT GNTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCTGNG
TGGGCATAGG TGGGCCTGGG AATCTAGGGC ACAGCAATTC CACACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGCCCT
GCATGGTTTC ATGCTGTGAA ATCCAG

SEQ ID NO:1067: (Length of Sequence = 220 Nucleotides)

AAAAATGCAAT TGGTTTGTTA CTGAGTACTA TTCGTGGGAA GACAGCATCC TGNACTCCCT CTCTACAGAA TATTGGGAGT
AAAAATGAAT GTCATCCCCG GTGGGAAATA TTATTGGGGG TTGGAAGCAC AGAGCACAGG AAAAATTAAG TNCAGGAAAC

281

AGACACTAAG AGTGCACTGG GCAGGTCTGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEQ ID NO:1068: (Length of Sequence = 412 Nucleotides)

TGGCCAGCAT CTGGGAACIT TGGGTGTGTG GACCAACTTC TTCCAACAG TGCGCACTGA TGGCCGGGGC CCCAGCCAGG
CCTGNCTGGA AGGGTCTTCC CCGNCCCGAG GGACTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA
TNCAGGNCAG CCCATTGACC CATTTNAGGG GACAGCTGGA GGGGAAGCCCG GAGTCCCTTG TTTCTTCAGC TGAG

234

TCGCTCATGA AGATAATTTA ATGCTAGACT GATTTCGTGA GAGTAAAATC TGGCATGTC TTCAGGAAGT TTTCTTTGTC
GCTGCATATG AAACATTAGG TCTCCTCCAT TTACATACTC TATAACAAAG AACAACTCTG TTTCTGTCTG AAAGCAAGAA
TGCAGCCTAA CAAGGAAAGG ATGATTGGAT GCCTGCTCAA ACACATGCTT CTCTGTCTGT ACCCAATCAA TATCCTCATC
ATCATTAAAC AGCTCTTTTT TCACAACCTT CATTCGATAA ATACGATCTG TTTTTTTTAA TCGAACCAAC AGTACTTTGG
CATAACTTCC TCTTCCCTATT ACCCGGAGCA AATCAAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG
NGTCATTGCC TC

SEQ ID NO:1070: (Length of Sequence = 358 Nucleotides)

GTGATTGTC CACTGCACTC CAGGTGGGT AATGCAGCGA GACTGCGTCT CAAAAATAA ATAAATATAA AAAAAAAAAA
AAAAAAAAAA AAAAAAAG CACCACCGCA CTCACGCTG GGCAATAGAG TGAGAACCTG TTTCCAAAA AGAAAAATNT
TAAAAGANTG ATCTNGGCCA GCGGTGGAGG CTCATGCTTG NAATCCCAGC ACTTTGGGNG GCCAAGAACA GGTGGTTTAC
TTGAGGNCAG GAGTTCGAGA CCAGCCTGGC CAACATAGCA AAACCCCAT CTNTACTAAA ATTACAAAA GTTAAGTGGG
CATGGTGGTA CATGCCCTNG TAATCCAGT TACTTCCG

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATGA ATTCTGCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT
CCCTCATAGC ATTTAAATCT CTTCACCTTG ATTAAAAATT CCTAGTTCCT CTTCACTGAA TTGTTTAGAG TTTTINAGCA
GCCTCTGCCC TGATTAAAC AAATTAGCAT CAAAGATCCC CTGTTGAATG AGAAATCAAT AATTGAGAAA CATGCAATGC
TCCTTAATTA CTTTLAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCCAG AGGGCCCTGC CTGCTCTGCA CCGTGAAGTC
ATTTCTGTGA GCTGCTGGAA TAAACTCAA GTAGGCAAC ACTATTTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA
CTGTAGGATT G

SEQ ID NO:1072: (Length of Sequence = 342 Nucleotides)

TCCCATTTTT ATAATTATTG GAACATGAAA CTGTATTTCT ATGAACCTCA TGATTTTTTT CCATAAAATT ATATGCTAAG
AGAGTCACCA CAAACTATG AATTCTCTCC CGAATTATTT TTGCTTCTTT GGAGCACCAT AGTCTTTGTT CAAATCACA
CATGAACTG TTGCTGCAAT GCTAAAGATG TGAATCCACC ACTATCAATA CGGTCAGGGT AAAACCTGGA GCCACATGTT
ATTCAAGTTA TTTTGTAT CTAAATGATT ACATGAAAAT AAAATAGTAA GCCAATATTA AATTGTAGG CATAGTTGCC
CCACCTNAAA AGTGTTTACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTTTTCTGTC CTGGCTAGGA TAATGCAAGC NCTTTTCAGA TGANTCAGAA TCGAAGAAAA TACGCTGGTA AAACAGGACC
TGATTTACCA GNACTAAAC AATTCACTC CCATTTCCAT TGCTTTCAAT ATTTTCACAC GNTACACGAA CCTTTAAGAT
GGAAAGGGAA AGCGATTTTT TTTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

282

SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GGTTAAAAAT TCATCGGAAT GTATAAGCTT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA
 ATACATGCCT TCCTTTTGGG GGATGGGCCT GGTTAATCTC CAAATTGGCC GTTTGGAACA ACTCATCATT ACTGTACAAA
 GAAGGTACCA CTGGTGGGA ACTTTCACIT TTTAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC
 TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAAACCTG GTACAGATGT AGAGTGCAGC ATGTTTTCAC
 TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEQ ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAAGTTGA CAGTCCAATC AGAAATATTT AAACAAAGTT TCACTACTTA AACACCATCT AAATATACIT TTTGTTATAT
 TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGIAT TTTTCCCCCT AAAAGGCAGT TTAGATGTNC
 TCATTCTAGG NTTTCCATCT CTCCTCTCCA CCATTCCAAT TCCCAGAGTA CCTCTACAAA TATCCCTGCT TACCAGTAGA
 NCTATTGCT TTAACAATCT TTCTGTGGT AAGGAGATGC ATATGCCAAT GTGAAACTA TGGAGGGGA CTCCTGCCIT
 CAAAGGCTGA CTAGAAACCA TTGGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTGA GATGGAGTCT CGCTCTGNG CCCAGTGTGG AGTGCAGTGG CATGATCTCG GCTCACTGCA AGCNCOCGCT
 CCTGGGTTCA TGCCATNTC CTGCCTCACC CTCCGAGTA GCTTGGACTA CAGGCGCTG CNACCAGCC CAGCTAATTT
 NTINTGTGTG TGTTTTGGC AGAGACAGG TTTCACCATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC
 CCGCCTTGGC CTCCCAAGGT GGTGGGATTA CAGGCGTAAA TMACCG

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGT CACATTTTAC CCATGAAACC TTTCTAAATT ACCTTTGTGA TTINTTGCCT ATCCTTCTAC ATCATCATAC
 TTCGTCAATT AAAGTCACTT TTTTGGGTAA CATTTAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA
 TTAGATGTT GTCAATGCTT ACACATGGN AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG
 AAAGAAATTC CCAGAAATGA TACTGGAGCA TTTATTTTAC CCTCTAGGAN CCAATGGAC TNGGAAGGAA GTAGAAGATG
 GGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTTTAAGTGC GAAGATTTTA TTAGGCGGTA CAATCCAAG GTGGTAAGGG TGAAAGGAAA GGCGAAGGCA GGCAAATACA
 TTATTGAGCT GAAAACAAT TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCIT GGGACTGTNT
 GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACTTCATG CTTTCTSCC CCTTTGGGGA AAGTATGCCT CAGGACCTC
 TAACTCTCCC ACTTCTCTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATCTGTTC CTTCAAATTT
 YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCACTGCT

SEQ ID NO:1079: (Length of Sequence = 439 Nucleotides)

CTTAAGTTAC TGAAATTGAA ACACCCCTTG TCCTTCTCGG CGGCGGCTC CTGGTCTGIN CTTTACTTGG CTTTTTTCCT
 TCCCGTCTTA GCCTCACCCC CTGTCAACC AGATTGAGIT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT
 AAAGATTGGG AGTCGTCGAA ATGTTTAGAT TCTTTTAGGA AAGGAATTAT TTTCCCCCT TTTACAGGT AGTAACITCT
 CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATA CATAAGGAAC ATTGAACITG
 TAGAGGAGTG CTCTTCCAAA CAAAACAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT
 TNAAATCAGG GTAACCCCTT TCTGTATTG AGTGCAGTG

283

SEQ ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAAGTCCC TGAAAATAGG AAGTCTCAAT TAAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC
 TCTCAGTCTT TGGGATGGTT TTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC
 ACATTCCAAT GTTACCTGNN ATTAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG
 CAATGGAATT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AAACCTAGCCT TAAAAACTGG
 TACATAATGG TTCTGGGTT CANTGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTTAAATGGG
 ACCTTAAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCGTTTAA ACCAAAGGCG CACTAAACCT CGTAAGCGCA TGANCAGATT TAAAGAGAAA GAAAACCTCTG AGTGTGCCTT
 TAGGGTCTTA CTTCCTAGTG ACCCTGTGCA GGAGGGGGCGG GATGAGTTTC CAGAGCATAG AACTCCTTCA GCAAGCATAC
 TTGAGGAACC ACTGACAGAG CAAATCATG CTGACTGCTT AGATTGAGCT GGGCCACGGT TAAACGTTTG TNATAAATCC
 AGTGCCAGCA TTGGTGACAT GGAAAAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCAGCTGT
 GCGGTCAGAG AAGAAACGCC TTAGGAGGCC AAGCAAAGTG GCTTTTGGA TATACAGAAG AATATGATCA GATATTTGCT
 CCTAAGGAA A

SEQ ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTINC AAGTTCCTA GGTGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT
 AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTTCT GTACTTCAAG
 TTTACGGCA CATCTGATAG CTGTNCCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTTGAAGGT TTGCNTAAGN
 TTTGGCTTGA GCGACTTTAA CAGTTTATT TCAAAGTAAT TTGTGTTGT AGCCCCACTA AAGTAATTTT GGGCCAGNAA
 AGGTTCAAAA TACGGTTTTT CCTACTTAAG

SEQ ID NO:1083: (Length of Sequence = 430 Nucleotides)

GTGAAGTCCA CCTGCTTATG GACAGCCCAT TTGCATGGGG CCTGCGTGT GGTGCAGCCC AGGGTATGTN AGGAAGGCCT
 CANAGGAGCT GCTGCTGCCA CAGGTGGTCA CCAGGGCAGA GGTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT
 GGACAGGGGC AAGTACATA CCTGCTGTTT ACCATGGGGT CACGGCAGAA CCTGINTCAC GGGGTGCTTT GTGATGCCAA
 ATGGATATAG GTGGGACGTG CTGGCAGCAG CGGCTCAGC GTGAGCCAT CTCCCCTCCC GTTCGTCTCC GGCTGCGCTG
 TGGGCCIAAT GGTGGCACCG TTTAAGCANC TGCTGTGTG TCAGCCTGGG GGNCTGAGGG TTTCCATACA TGATCACTGG
 TTCTACCCA AGGCCTTAAT TCTNCCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAGA ACAACACAAA GAAAATAAAG AAGTAACCTC TTTACCCAC TGAAATAATC TCTGGAAAAG
 ATATTAGCAA TCATGCAGCT TATAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NTAAATTTTT TTTTCAACAC
 ATAAAATACA ACATGGGAAA TAAGATGTTT TTACTAACA GGCAACACT TGAGGNGTCC TCTTCAAAGA CTACAGTGA
 TGAAAGACCA GTTATCCAAA GGAAACGGTT AGTAGAAATA TAAAGTTAGT CCCACACAAA ATTAAATGG TGCTCAATGC
 AGATTATCTA TCATTANACC ATTTTAAAG GCAATTTNTT ATTTAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCTTINA GCTGGCATAA TTTAAGTTT TAATTATCCC TTAATCATAA GCTGTACGAT TCTATAATTA AAAAGTTAAT
 GCCTTCTTAA TGTCTATNCT AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTTT TGGTCTCTAC TCATTTTGCC

284

TTCTGATTAT ATTACAACTC CAGCTGGTGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCATTTCAT TTTAGCTTCT
 CATTGAAAGG TAGATAATCA GTATGAATTG TAAACTGGCA TTAAGGGAGA AAGTAGGNAT AATCAAACCTT GATCTGAGAA
 TTAATCTGCTG GTGCATTTC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTT GGAGGTGGAT
 AAGGAGGGCA GCT

SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

TGGATAGCAT GAGGCAAATT GCCAGAAGAG AATTTCTTTC GCATCCTAGT AGAATAAATC CAAATTATCT TTGTGGTACT
 GAGGATGTCT GGTTTAGCAC AGTGTAAAGT TGTAAACACTT TAACAGGCTA TTAATTCACA GTCACTAATT CAATGCTTGC
 CCGGAGTTTT GCTAGAAAAG GATGAGAAGG ATTAAGGTAA AAAAAAAAAA NAAAAAAAAA AAGATAAGGT TAACCAGATA
 CATCTTAAGA GCTGATTGCT CTTCAATCCC TAACTCG

SEQ ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT TTTTTTTGAG ACATTGTCTC ACTGCGTCGC CCAGGCTGGA GTGCAGTGGT GCAATCTTGG CTCCTGCAA
 CCTCTAAATC CCAGGTTCAA GCGATCCTCT CACCTCAGCC TCCGGAGGGC NTGGGATTAC AGGTGTGAGC CACCGCGCCC
 GGCAGCATTA TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA
 GTTTTTAAAG TTTATTTCCC TATTGATGSC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT
 TTTTGGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

SEQ ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT
 TTCCACGAGC GCGAAGTGAA GGAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCTNCTCCC
 NINCTACCTT GGAAATATAA GTGTCAAGTT CATACTTAAC CACCCCTT

SEQ ID NO:1089: (Length of Sequence = 409 Nucleotides)

TTTTGCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA
 AACATTGAAG AATCAATGAG TGCCGGAAAT AAACAGGATA GGTGGCAGCA TAGCATGCCC TTAAGANCAT GGCTGTGGAT
 TCAAATCCCA GACCAATCAC TGANTTTCAA GCCACTTTGC CTCTCTGAGC CTCTGTTTTT TCATCTGTCA AGTGGCAATA
 ACAATAAATG GTACGTGCCT CATAGGGGCA CCTTGAGGAT TAAAAGAGAG GGTTTCAATA AATCAAGTAC TGATTTCAA
 ACCTGGCACA TAGTAGGCAC TCAGCACATG GNCCTTATAT ACTTNTGGGC CAGCAGCGGC TGGGGCTCAT CCTCCCTGG
 CTGGGTCCA

SEQ ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCTNTCC CCATTTGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC ATTCAGCATA TGTAAAGGAGA GGATGAGGCC
 CGTNAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGGAAC
 GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACCT CTGGAGGAGG
 AACCTATGGA TTTTGTGTTT CAAGTTTACA GAATTTAATG CTCGAAAACCT GCATAAGTTA TNCAGATGG CTCATAAGNA
 AAGGTCTCAA GAAGAAG

SEQ ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACTACCAC AGGAAATCTC TATACCCCTC TTGGCTTTTC CTTTTAATGT AATTTTCTTA AAAGCTTCAA GATAATTTTT
 AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAAATGT TTCTNCTGTT
 GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

285

TAAATACAAA CACGGGATAT ATTTNGTCAT AGAAAAAAT GTGTTACTGC ATTATTTTGC ACTTCTGAAG GACTGCAAAC
 ATTTTTCAG CACAATAAGC AAATTCTTCT TTCAAAAAGG NATACTTNG CACATATGTN AGGTTTGGAA AATGACTAGG
 NCCCTAGGGA G

SEQ ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTTNCAC TGGTGTGCA ATTGCTCAA TATTTINAGG ATGAATATCC
 TCACCTTGGG GCGAAGTTTT TAAGAGTGAA TTTGAATTAC TGGAGCAGTG AACAAATTATT TAGAGTCTGG TATAAGTGAA
 GAAAAGAATC ATGACCTGTA AGCTGTCTTG NAGGTACCAG CAACTGNCT CTAATAATTTA TATGGAAAGG CAAAGGGGTT
 AGAATAGCCA ACATAATACT GNAGAAGTGT GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC
 AAGGCAATGT GGCCTGGTG AAAAAGTAA

SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTTGTT TTACATTCTG GATTTTCCTT TTTACTTTCC TAATGATGTA ATTAACTINC TTCTGTATT TNCCATATTT
 CCTATAAAT GGTAGTTAGA TCTAAAAGCT TGATTTACTT ATTTCAGATT TCTAGTCAAG GGTACTCAAT AGATTGTATT
 TCCTTTTGGC TCACACGGAG GTGCATAATG TCTGCCGTGGC CTGTAGTGAT GCTAAGGTTG ATCATTCTGT TCAGGTGGCA
 TCAGTCTGTG ATAACCTTCT GTAAGAATCG TTCATTAAAC TTTTCTCTAA TGGNTCCATT CATTATGAT CTTTAACTGA
 ATCCCTGTGA TTTTATTAGG GAATAGCAAA ATAATGATTT TCTAATTCTG TNATTCTTT CACATTTATT AACTGTAAAT

SEQ ID NO:1094: (Length of Sequence = 414 Nucleotides)

GTCAGINTC CATAACTGTT TCCTGCTGAC AAAGGGGCAG TGGTATGGT TCTNTGGGTC TTGGCCTCTT GCTAGCTGTC
 ACAGCAGGAG GGTGGCTTIN TGGATTGGTG AAAGTGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGCAGG GTTTTNCCTA
 TGCCAAATAT ACTTCAGCAG TAGAAGCCAC AAGATTACAT TATTAAATTG TCCCAAGAGT CCCCAGTGC AAACCCAGC
 TGAACGCCAT TTAGTTATAT NCTGGTGCGT TTTCTTCTG CAGGAACTCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG
 GGGGCCAGAG TGACAACTGG TAGAAACTA TGTATTCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG
 AGTCAAGTTT ACAA

SEQ ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCTGGCAA CCAATTATGT AAATAGTCAT ATGAATCCTT CAGAATGGAT AACACAGCTT TNCCTACTGG TGTGAAATAG
 TTTTCAGGIG CTCATTCCTT ACTTCATTAG CTTATCTTAT ATCATTAGCT TATCCTCCAT TCAGGTATTA CAGATCTTTT
 TTTTCIGATA AATATGGCAG TTTAGGGAAA TAACTATGG CATAATATGC TAGGCCATTG TTCTAGGCCA CGCTTCTTTG
 ATTGTAACTT TAAACCTTT ATCAGAACCT AAACAACCTT TCAAAAGATC TATACATATT TNNATCCAAT GTTTAAGGCT
 ATGAGTAATT CATTATGGTC ACTCTTCATT TTTTNCACCT GATAATGATC TCGNCAAAA TGTGTAG

SEQ ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACTTAAAGC TTTAGAATGA TTGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA
 CATCATAGGT TTGGATAGCT AGTTTAGGAG TAAGTGAAAC ATTTTAGAAG AGCATTATG TTAACCTTGA CAATAGGATG
 GGAGATTCTT AACCCCTTT GTAATATGCA CCGATTGATT CTNAGTTAA ATACACCACA GTGACAGTGA TATCATCCCT
 GTACATCCTC GCCAAGTCT CTGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCATAC TCATTGTTC
 CGATGGCATG TCTGATCAGC CGCGTGGCTG CATTTTGGTC AGCCTCGTGG AGCCCGCTGG CTTTCTCTG CAGCAGCAGG
 CTCTGCAATG AGNCCC

286

SEQ ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCTC CGGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC
 AATTITGGGCT AAATAGTTTC TGTCACAGG ACCGTCCTGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC
 CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTACAGTGT CCTGGCATCT GTCTCAGGGT
 AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTTGAGA AACTTTCTAC TATGGTATGC
 TCATCATTTCT CTGAAGATGT CAGGGCCTGT TTGTTTGTTT GCCTGTTTCT CTCACTTTTG CCTTATAATC AGTTCTTCCT
 TGTGGS

SEQ ID NO:1098: (Length of Sequence = 326 Nucleotides)

GGCCCGCCCG CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTTTTATAA
 AGTTATGATG TGATGAGTTT TGGTGTAAATG TTTTCCCTC CTCTACCTAA AACCCTTCAT GCCTTCCCAT TGCTCTTAGA
 AAACACTCCC CAATCTGAAA CATGACCATT TTTGTTTTN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC
 CAAGCTGGTG CTGGTGTCTT TCCGCAATNC CCCTATTAGT TTTTGAGCAC CTGGACCAGT AAGGTGTTC AGTCTACTTT
 GCACTT

SEQ ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAACACGAAC AAGTTTCAGC AGTCTAGCCT TTGGATGACC TATTTGAAAA CCACTGAAAG TCGTGGAGGA ATGGGCAAGA
 ACCACCTCAT GATTCTNCAG GCCATTGCTA ACGAACAGCT CATTGCTACA ACCAGTCCAG AGGTTTTATT CCCTCTACTC
 CGAGCAATGA AATAGACCTG AGTTATGCTT CCTTTCATTT AATTTCTGCA GATAAATAGT TTCTTGAGCA ATGGATGCTA
 TGCTTGATA CCACTCTCCA CTGTGCACGC CGGAACTGCC TTGGGNCAC AGTTACAGAA AAAATGTAAA CTCAGAGTGA
 TCCTTGIGTA TATTGCTATA GA

SEQ ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATGCTTGAG CCCAGGAGTT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG
 TCAGGTATGG TGGCGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGGAGTAGA
 GGCACAGTGA GCCATCATG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAAA AATTAAATAG
 AAAGTCTTCT TTTTAAAAA TNCGTCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEQ ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAACTT AGTGAAGAAG ACATGTCAAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT
 ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC
 AGTTTTAATA TTCTGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC
 TCTTCAATTC TTACGANGGC TGAGAGAGGT AAGGAAGTGG CAGAAAAGTT TTGAAGTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCCTGGC TAACACGGTG AAACCCCTC TCTACTAAAA ATCCAAAAA ATTAGCCGGG CGTTGCGGCT
 GCGCTTGTN GTCCCAAGTA CTCGGAGGC TGAGGCAGGA GAATAGCGTG AACCTGNGN GGCGGGNTG CAGTGAGCCC
 GAGATCGGGC CACT

SEQ ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGTCTT GCTATGTTGC CCAAGCTTGT CTCAAATCC TGGTCTCAAG CAATCCTTCT GCCCTGGCCC TCCCAAAGTT
 CTGGGTATTA CAGGTGTGAG CCAGCACTCC TGGCCCATCA CAGTCTTAAA ACCAAAAGTT CTGTGTCCGA GGAAAACCA

287

GAGTGATTGG TCACTCTATT TATGACTCAT AGCACTTACA GGCTACTTCG GCAGGGACTT NGGGTACCCC TGTTCCTGGA
 TGGCACATCA TTATCAGCAA CAGGAACAGT TTCTCTGAGC CTTGGGCCCT GGAGAATCTC TAGCTTAGCT ATTTTAGACT
 TGGGGTCAAA GAAGAGAGGC TCTTTGCCAA CTCAGCAACA

SEQ ID NO:1104: (Length of Sequence = 400 Nucleotides)

GGAAGCAAGA CAAAAAGGA CAGAAAAGCT GGTTTAGGTC TTCAGTATGT TTATTTGTCC CTCACATAGC GGCTTGATCT
 GTCTGCCTGT GTGTCACAT AGTTAACCAG AAACGCTAGG AGGAAGTTGT ACCAGTGGGA TACCTCCTTA GGTGCCAAAG
 TTTTATTTTG AGAAATAATA TTACTTTCCT CTTCTGAAAT AAAATAATAA TAATANGANT GAAACCCCCA AACCACAGTG
 TGAGTCTCAG GTTAGCATTT GAAAACATCT CCAGAGACAT TGTATTCTCT CAGGAGGTTT CCGTGAAGCTC TTAAATGTGG
 CTGATGTTTC ATGTTTAATT TATTTANTTT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCAGTGCAG AGGGTGACCA AGCCTGGGAA GGCCCCAGGG GTCCAAACACC AAAATTAAAG GTTTATTATA CACAAGAGGA
 CGTCTGTCC CTCANAGTGG CTGGCCACCC TCCCCACTCT GGCCAAGGTC CTGCACAGAG GTTGTCTCTC AAGGGTGACC
 CTCTTGGCC GCCACAGCT AGACCTCCGG CGGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCACIT GNCAGCTNC
 TCAGCCACCG NMTTGGCATC TTGTCTTNA GGTAGGCGCC TTNTTGCCA TTCAGACTTG AGTTCCAGCC ACTCATAGAA
 TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCCGGGCC AGAACAAAGG

SEQ ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGTATCTINTT TGANTTCTAA ACCCTTGCTT TTCCCACTGC AAATGTTTTT GGCTAGAGAG CAGGCTATTA AGACATTCTA
 GCCAAGCCAA TTTCTTGAGA GTNCTGCAGG TACCAGGTGT TGCTGGAGCC CAGCATCTGC TCAGAGGAAG GCAGAGAGAC
 CCAGAGGAAC CCAGAATGAG ACACTCATTT TTGCATCCTC AGTTTCCAAA TTAATTTTNT AGCTCCTGGT TAGGACCCGA
 NMTNCAGAGA CCAGGCAGCT NTCCAACAAG AATGCTGACA GGTTCATTG TCTCTAGGG TAGCTGCTGN CTAAAGAATA
 TTTGATTTTTT TGGG

SEQ ID NO:1107: (Length of Sequence = 346 Nucleotides)

CTCACTTTAG TTTGAGTCAA TATCTGAGAA AAAAGAATG GAGTAAAAGC ACAGAAAGCA AAACCTAGCT TAGAAAATAT
 TTCCTAATTC AAAAAATGAA CAAGTCAGAT TCTGTAAAGA TATCCAGTGA AATCTTGAAG AAATATTGTA TTGATTATTA
 ATTAANCTGA TTGGAAAGTG ATCTTGGGTT CACAATGAGG TTGTTGAACA AGTAGCATTT TCATACAAAT GCAAACCAAT
 TCAATGTTTT TNCATACACT GTTACATTT CTTTNCAAAA TTTGATTTCT TCTTCGTGAT CCTAGTCAAA TTCTGCCCTC
 TCAGTAAATC TTTATCAAGT TTGCAG

SEQ ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCCTGGCGAC GTGGTCCCGG TAGGAGACTT AGACCTGAGC TGGATCTGTT GACCCCAAAT TGTGCTTTTC CCACCAAGAA
 GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCIGAACATA AAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA
 GCTATTCCGT TTCAAAGCGT TCCTAGCGCC CAGCTCTCCT AACTCCTGGC CAGTGTCTT GACATTATGG TAATACATAA
 AGACTTTGTT TCCGCTGGTG TGTGCTGTG GGAAGCCTCT GACTCACCTC CGTGCTCCAG TAGCACCCCTG TGCAAGCCTT
 CCAATGTGCG CTTTATTGCG TGGCGCGGAA GATAATAGTT TGGATTNCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA
 CTTGGCACAT

SEQ ID NO:1109: (Length of Sequence = 352 Nucleotides)

288

CGCTCGINTG TOCCACACAA ATGTTTAAGA AGTCACTGCA ATGTACTCCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA
 AAAGATTCCA GTGCCCTGA AGAGGCTCCC TTCTCTCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA
 TACCGTCTAT AACCTTAGGG GCCCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC
 AATGNCACAN CTACTGGTTA CCCCTTTTGA GGGGCATTTT TCCAGACAGA AGGCCCTTG AAGCCTAGGT AGGGCAGGNT
 CAGAGATACA CCCGINTTTG TCTCGAAGGC TT

SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GTITTTTTC TTTATNNCT CCCATAAAA CAGTATGTAC AAGGTTTGA TTCAGGGGAG AGAAAGGATA TATGAAGACA
 CATTCCTCCC TCTTCTATT TCTTACCTGG TTAGAAATAA ATAGGCATAT AGTCCNGTTT ATTATGGGCA GGAAGGTAGG
 TAAAGATCAC CTAAGTNCCT ATGGCGTGT GGCCTTGGCA CATGAGAAT GAGTTTTT

SEQ ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAAGCTG GCCTAGGTAG GGTACAAAT GGGTTTACT GAACITAAAC AGCTAATTGC TACATCTCTG
 AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT
 GTTAATCATA CCATCTAAAA AGAAACTGT CGACTAATCA TGTGTTTACA A

SEQ ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GTCCCGTGAA TAGGGCTAGC AGTGGGATTT TTGTGTTATA GCGAGGAAA TAAACACTCC TTTTGCTGAG
 ACTAAAGAGC CAGGTGGGG TCTCTGGACA CATAGTGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC
 GTTCATTCTC CCAGCTACTT GCTAAGCAGG TNCCTGTGA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG
 TCCTGCCTGC CTGCCGAG CTTCTATTTT CCINATGGGA GAATGCTGCT CCATTTTGT ATTGGAGGAA CTTTTTGCAA
 GCAAAGCCTN TTTGGGAAA AATGGCGGC TAGAAACCTG

SEQ ID NO:1113: (Length of Sequence = 448 Nucleotides)

GCGGTAAGT CGTTAGTGAT TAGAGTTTTT NCCCTGCCG AGGTGGGATA CACGGTAGCA TCATGGTCGA GGAGGTACAG
 AAACATTCTG TACACACCTT TGTTTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTA GCTGATAATG GAAACCTGT
 GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCTGINTTG CATATGCCTA
 CTTCAAAAGA AAATCTTAAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTTAT AAACAGTACC CTGCCAATCA
 AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGT TNNTTTGGAC AGCAGATACT
 AAGTTCCNGA GGATGCCAG TGATCAGNTG CACAGTCTTA GCGGTGGC

SEQ ID NO:1114: (Length of Sequence = 268 Nucleotides)

GGCGGCCAGG TGGTGCCATG NTCTTNTG TN CTGTGCGTCG GCGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC
 CCCGACTGAT GTAGGTTGCG CACAGGAGGG ACGGAGATCT TGCTGGGCA GGACGCGCG GCGGAGCGC CACTCCCTGG
 CTTGGCAGGC ACCATCACCT CGTGACGGG CCCGTAATAC AGCCACGGG GCACACCGTG GNTTCTNCGN CAGCCTGTTG
 CGAGCTTTGA TCCTCTGTGA GACAAAGT

SEQ ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCCTGGA
 AGTCTCTCTG GGCCTGCCAC TCTTGGTGAT CATCACTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA
 AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGGAT GAAGAAGACC TCTGTTCTC TGCTCAACCC

289

AAGCTTTCTC CAGATGGAGA AGAGACCATC ACTGCCTGTT TAGTAGGCA GGAANGCAGA GGTGTTTCTT TTCTGGGGCT
AAAGNCTCCT TCTGACCACA CA

SEQ ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTTTGGG AGGTAGGGAT CATAGTTCCA CTTCAATTGAT GAGGAAACT GTAGTGCAGA GATGGCATACT ACTGTCCAAG
AACATGGTGG TGGATGGAAC CCAAACCCCA ACTTTTGCTC CCATGINCTC TGTCCACTGG CTATGGCTCT TGGCCCTGTG
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTGTGATTCC
ACCATCTTCA AGGTCCCTGC CAGCTTINAT TTATTTAAAT TTGGATTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT
GGGTACCAAT GGATTAAAGG GGGTNAATC TGGNGGCTNG TGAGTAAAT TAGGGTCCCC AAATGG

386

AAGGACCGGG ATTCTGATGA AGCGTGTIT CTCACTGCCT GAAGTTTCCC TTTGGAGTTC CAAAGTAAAG GACACATAAG
CAACACTTCC AAAACAAGG GAACAAGGTG GTTTATTGTA AAAACAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAAT
GCAGCTATGA AAAGGGAAAA AAGTGCCAG TTCTTGATTT CTTAGATACT GAAGAGGACG TAGCATTTCA TTTATCAAAT
ATAAGGAAAA TTATTCACCA TTTTGAAGCT CACCTTAGAC TATGAAAT ATATTCACCTG CAGAGCAATT ACTTCTGTCA
TTACCTGAAG TGATCAGTAT CTATCTCCT TGTATAGCA TGCATCTCTC AAAAAGGCCT CCACTCCTTT CCTTCACATC
TGTTGTCATC ATGATT

SEQ ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCCAGGGC GGCTGTGGAG GTGTTCGGGA AGCTGAAGGA CCTAAACTGC CCTTCTCTCG AGGGTCTGTA
TATCACAGAG CCAAAGACAA TTCAGGAAGT GCTGTGCAGC CCTCAGAGT ACCGCTTGGA GATCCTAGAG TGGATGTGTA
CCCGGGTCTG GCCCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG
AAGCTGGGCC ACGAGCTGAT GCTGTGTGCG CCAGATGACC AGGAGCTCCT CAAGGGCTGT GCCTGCGGCC CAGAAGCAAG
CTACACTTCA TGGACCAGTT GCTCGATACC ATCCGGAGGC CTGACCATTG GGTGCTCCA

SEQ ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATTCAA GAGTCITAT TGAAGACTTG AGATGGGACT TCCAACTCAG AGGATGTGGG AATCCCAGCT CAAATGATAC
AGGATAAACT GGGATGGGCT AGGATGGACA GGCTGTGGAT ATGGGAGTCA TGGGTCAAAG TCTTATCCCA GATGGCTCCA
GGTACAGTGG GCTTCTGGG CTGGAAGCTG GTTCTCCCC ACTTCATTCT GCTCAAAGCT TCTTGAAGGA GCT

SEQ ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAACAA CCATACCCCTT NCTTTTGAGG AAAACTTACA AACTTTTATA AGAATAAACA TGAATCTNCT TAGAAAGTTC
CAAGATAACA TACACAACCTG ATTCACCTCT TCATATATAG GCACCACACA CATAAAGATG TAGCCTAAAT CACAATCACT
TCTCACCAGG GATGGAGATA GGAATTTACA TTCTTGACTT CATTAAGTCT CTAATTGGC AAAAACCTCC AAGCCTTTTA
TACACATGCT GCGTGTAGGC CAGATCTCAC TCATTCTTAT AATTGTGCAA ATAATATGGA GACCAAAAGG GCAGGGTTTT
CAATT

SEQ ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGTATTT TTGTCTGTAT GTCCTAGCAC TGTTCAACAA CAAATTTTNC TAGTCTTGT TAATTTTINAT TTGTATACA
ATGGAAGCAC AATGTTATAA GGAAGGTAA TTTTAAGCTA ACAACCACTG CACAGCCTCA GGTTTTAAAT TACAACCACA
G

290

SEQ ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCTTTTAA CATCAAAGTA CTACCAAGTA AAGAATTAA AAATTACTTG TCTAGTCATG ATATATTTTC CTNCTGCTGC
TGAAAAATCC CTGCTTATT ATTCATGTA CCTTTATCAT TCATTTGATG AACTGACAG CAACTGCTG AACAAAGTTA
AGAATAGCTG ATATTTACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

CCCTAGAGTT AAATTCACC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA
CACCACAGCA GCACTGACAG AAACAGAAAT GATTCAGAGA AAGCCAATTA AAACAGCCAG GGGATAAAGC AGATCTGTAT
GACATTAGCT TTTT

SEQ ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGGT TCACCATGTT GGCCAGGATG GTCTCTTGAC CTGTGATCC ACCCGCCTCG GCCTCTCCAA
GTGCTGAGAT TACAGGCATG AGCCACCGCG CCTGGCCCGAG GGAAGGCATT TTNAAGAAA TAATAGTTGA ATTGAGATCT
GATAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEQ ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATGG GTTCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGTTTNT
CTAAGAGATG TTTTAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG
AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTTNTTGTG GGTCTGTACA TTTAGACATT AAT

SEQ ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTTTTTTTTT TCCTAGGGGC CGCAGACGG CTAATTTTATT ATAATTCCTC CGCCGAGTT GCCCTCTGGC GCCAAGCGC
AGAACGGAGC GCCCGGGATG CAGGAGGAGA GCCTGCAGGG CTCCTTGGGT AGAACTGCAC TTCAGCAATA ATGGGAACGG
GGCAGCGTT CCAGCCTCGG TTTCTATTTA TAATGGAGAC ATGGAAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC
GGATTAGCTC CAAGAGCTCT CACT

264

GTGTGAATAG GCAAGCACTT TGTGTGTGT ACTAAGGAAC TCAAAATGAT AGGCTTTTTG TCACCATGTG CTTCCAGGNT
CTCTGTTGCA TGAGCAGAGA TAGAGGATCT TGACAAACA ATTAAATGCT CTAGCCATAA GTAGTGCAAG TTTCNTTGC
TTGAAATTTA CTGCTGATAG CCCTTGNC ACACCTTACT TCAGAGGCT AGGAAGTACA GTTTCCAC AGTCTAAGAA
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTT AAAAGAATGG GAATATGCAA
G

321

ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA
AAATCTCAAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG
ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG
AGCTGTTTTT TTGAAAAA

SEQ ID NO:1129: (Length of Sequence = 163 Nucleotides)

291

CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA
AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTC AACCCCAACC TTCAGAACCT GGAGGAGACA
ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTACTGT TCAAACAGCA ATGTTTAGTT GTACAACACA TAAAGTCTAG
CAACAATTAC AGGNCAGTT TGAGTGTCTG TTGCTTGT TTCAATTGGG AAATTAACT GTAATGTCAC CGTAAGATTG
GCTGGGACTG GTAACATTTA AGAAACGGGT TGINCTTGCA TCCCTTAGGC GTGGGCTCT TGCTCCATCA GGACTTGGTT
GTAGATGAAT GGCCACAAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA
ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTCGCAAAC ATTCATGCAT CT

SEQ ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGTNCIG GTGATGGGGT TACATTCCA TTTAAACCAG AATCCTGGAA GCCTACTGAT
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TTTCTNCTGG ACTTCCAGTT CATGCCTGCC TGTATACAAA AACCAGAGGG
CCTGCCTCCT ATCAGTNCIG TGGTCTTGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGGNT CCTCGAATTT
TGCTTCGAGG ACCAGACTTT ACACCAGCCT TTNCTGATTT TGGAGGCAG ACACCTGGTG GAAGAGGCGT ACCTTTTTTG
AATGTTGGGT CACGAAGATC TCAACCTGEN CAAAGAAGAG AACCCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA
CACCTG

SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTTTGGTT ACTTCAGGCA GGAGGGTAGA CATAGCACTT ATCTGGATTG GATGTAGCCA CAGGATTAGA ATTGTTGGGT
CATAAAATAT GTACATGTTT AGCTTTAGTA GATCTTGCTT AGAGTTTAAA AAATTAAAAA TTAATAATAT TTTTAAATTA
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTATA ATGTAGTTGA TCTTGGTTTT AACCAGAGCA TGTNGCTGGA
TTTINCTCCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTCTTAG TGATACCATG CACTTTTTTT TAGAACTTCA
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAAAAATAC TAAAGAAGGG ATNGTGGTGG TGGTGAGGGA GGCAGGAGAG

SEQ ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCGC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGAAC CTCCAGCAGC AGGAGCAGCA CTGCTGGCG
CTCAGACAGG AGCAAGTGAC AGCGGCCGTG GCCACGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT
AGACATGAAC GATTTTAAACA ACCTCCTGCA GCCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGGGAAGAACT
GGNTGTTTCA CAATGCCAAG TCCCGCCGC ACTGTGAGCT GATGGCCGGN CACCTCCGGA ACCGCATCAC GGCINATGGG
GGCACACTTC GAGCTGCGGC TGCACCT

SEQ ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGGCCACT TTNCCATAGG
GCTGCTGCAG TATGCCCAGG GCCCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG
CCTGTGAAAC AGCAAAGATG GCAGCCTACC GCTCCCTTTG GAAGCTTTGC CCTAGGGAGG TATGAATGAN CTINTTGTG
GCCCAAACAC ACCTGTAGGA GGTGGCTNGA GACCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG
TGCTTAAAAA AGCAGTCTGG GCCTCATTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

292

SEQ ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCACGTA GGCTTGCCCT TNCCTACTCC TTCTGGGAA CCCATTTGGC AACAAAGTGAA
 GAAACCTAGG CCAGCCTNCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG
 TAAGCCTAGC CAACACCAGG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAA TTGCTGACCA AAAGAATTGG
 GAACAAATAA ATAATTATTG TTTTAAGCTA CTGTGTTCT GGGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG
 GATGACCCCA ATTACTTGAA CTCTCTTAG GCTGTMTTA TCACGTCAA ATAGGGGATA ATTTTAGTAA TTTNGGGTGG
 CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGTGOGAG CCACCAGCC CAACCCAGAA CTCTTTTTAT TTTGCAAAT TGAAATTCTA CCCATTAAAT AGCAACTCTN
 CTTTTCCCTT CTCCCCAAG CCCTTGCCAA CTGCTTTTCC ATTTCTATGA CAATCTCTAC TCTAGATACC TCATAGAGGG
 TGAATCATAC AGTATTTGTC CTTTTATGAC TGGCTTATTT CACTTAGCTG CTATATTATT AATACCAGCT TTCTGGGGAT
 ATAATTCACA AACTGCAGAA TTGAATGGTT TTNAGTCTAT TCACATCGGA TATGTTTTTG AAGAGACAGT AAAACCAATC
 CTTTTTCCT TAGGTTCTCA GACACACACA TGCTTCTTTA TCTGGCAAGT CCCGTTATAA A

SEQ ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTTTTTGT ATAGACAGGG TCTTGTATG TTGCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCCTGCCCTG
 GCCTTCCATT CCTCTACTTT ATACCAGGT TATTCACCAA GCTTGTCTTT GTTCAGTGTA CTTCCTCATG GAAAAACTGA
 GGTGATATTT ACCCTGGTTT TTCTACCACT GTGTAAGTGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAATGAG
 TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTCCCA GTGATCCTCC CGCCTCAGCC TTCCAAGTAG
 CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG
 AAAATGTGGG CAAGAGATAG CAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GTTATCINCT
 TTTGTCAATT TAGAAATACA AATAAAATG ATGATGAATG CNCTTGCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT
 GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG
 GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTTAT
 TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACGAGAA GCATGCAAGC GGTGGCTCCA CCGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG
 GATACACTCA TTCAATTGGC CAAGGIATTT CCCAGCCACT TCACACAGCA GCGGACCAA GAAACAACT GTGAGAGTNA
 TCGGAAAGG GGCAATAAGG CCTGTAGCCC ATGCTCCTCA CAGTCTCCA GCAGTGGCAT TTGCACAGAC TTCTGGGACT
 TATTGGTAAA ACTGGACAAC ATGANTGTNA GCCGAAAGG CAAAGAACTC CGTGGGAAGTC AGTGCCAGTG ANCGCTGGC
 GGTGAGGGG TAAACCTTTT NCATACAGCC TTCAGGCCT CTCCACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TTCTTTTCTT AAAAGAGTCT GAACGCATCT NATGCAACAC
 CCAAAGTAT CCTTTNCTC CTCGTTACAG TATGTTTTGG CTTTGGAAATA AATGATTAGT TATTGAACAA TATATGGAGA
 AATATCTTAC AAAAGGAAGT CATTTCATT TTCTAACATC TTTTACATTG CACTAATTAC ATGGTTTAAA TGACTATCCC
 TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTTAGACC AGATATATCC TTCTAAAATC

293

ATTGTAGAT AGAGGATTCT CCTTTTGCT AGTAAATACC ATTAACATAT TINCAGANGG CCTGGTCTAG GGTCAATTAT
TCCAGGGCCT CT

SEQ ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCTGT GGCGCGCTCC GGGTATCOGG CGCCTGANGT TTTAGCTGCG GTGGCGGCGG CAGTCGGGAC CGACTNAAGA
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCGANTTGG TGTAAGAAAG ACACCGAAAG TAAAGAAGAA GAAACTTCA
GTGAAACAAG AATGGGATAA TACCGTGA CTGCTAACCG TTCATCGGGC AACTCCTGAA GATCTGGTAC GCGTCAATGA
AATACACAAA TCGAAGAATA GAGCATTAGT ACCTGCGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA
AACCAGNAAC TTAAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GGNITCTTTC TGATCAATAC CAGATGCAAA
GATGTGTTGG

SEQ ID NO:1142: (Length of Sequence = 392 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTCNNGG ATTGAATGTC TTTATTAAT AAACGASTAA ATGGTAGCAC AAATCACCAT
CAATATTTTT GGAAGGATTG GGGACAAGAT GTCAGTCAG AATATAATTN TCCATTTTCA GGTCTCAATG TAGCTGAAGA
ACTGTGCCCA CTGATCAGTA TTACGTATTG CAAATGCAGG AGGTAAGGCT AAAATAGGAC TTATGCCGTT CAGAAGATTG
ANTTTGAAAC CTTAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTTCAAC
CCACAGTTAG GAGCAAGTT GTAAAGTGAG TAGGINTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATTN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTTCCTCTC TCCTGGCATC TGCTATAAAA ATAAGAAGGA GCAAATATTC TTGCCTCTTT TTATCACTG ANCTGAAAC
CCATTGTAC TGCCATGAAA ATAAGCACTG GTCCATGAGA CCAATGCCCA GAAAATTCAG GCTAAGATTC CTGGAAAGTG
GGCTGTGGGC ATTATTTAAA ACACACACAC AAAATTTACC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGTTATTCA TTCCATTCC CAGAAAGGGA GTTAATGAAG ATAAAAATTT ATTTTAAAG GTCTTTATTG
AGAGAACTT TGTTTCTGA TATGAATAT TGCAGATGTT TTTATAATA CTTTCATTAA AATGATGTA ACAGTAGTAC
CCAACACTGT AAATCAGTG AAAATAGTAA ATGATTCTTT TATTACTAAG ACTGTCTATC ATTCTGAAGC AGTTGGCTTT
TTTTTAACCA TAGGAAGTCA TTCCCTCTA GTCCTTCCC TTCTACTCTC CTGCTCAGAC CATTAGTAGG TACTTTGTTA
AATAAAAAAC TAG

SEQ ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA
GCACTGCTGA CTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCCCTT ATCCAGANT
CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCAGGT TCAGAAACAT CTTGC

SEQ ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATICTAA ATAATTTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCTTG TATATTACTA
AGGTACCAC AACTCAGNT GGCAATTACA CCTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCTNCCAA
GTGAATGTCC CTCCAGTCAT CCGGTGTAT CCAGAGAGTC AGGCTAGAGA GCCTGGGGTA ACT

SEQ ID NO:1147: (Length of Sequence = 389 Nucleotides)

294

ATTTCACTGG CCATTAAGAC CCTGAAAGTT GGCTACACAG AAAAGCAGAG GAGAGACTTC CTGGGAGAAG CAAGCATTAT
 GGGACAGTTT GACCACCCCA ATATCATTCG ACTGGAAGGA GTTGTACCA AAAGTAAGCC AGTTATGATT GTNACAGAAT
 ACATGGAGAA TGGTTCCTTG GATAGTTTCC TACGTAAACA CGATGCCAG TTTACTGTCA TTCAGCTAGT GGGGATGCTT
 CGAGGGATAG CATCTGGCAT GAAGTACCTG TCAGACATGG GCTATGTTCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT
 CAACAGTAAC TTGGTGTGTA AGGTTTCTAA TTTCGGACTT TCGCGTGTCC TGGAGGATGA CCCAGAAGC

SEQ ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAAATTGCT TGCCATCATG AGCAGAAGCA AGCGTGACAA CAATTTTINAT AGTGTAGAGA TTGGAGATTG TACATTCACA
 GTCTTGAAAC GNTATCAGAA TTTAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTINATG ATGCCATTCT
 TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCCTAC AGAGAGCTAG
 TTCTTATGAA ATGINTTAAT CACAAAATA TAATTGGCCT TTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANTTT
 CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAATC TTTGCCANGT GTTCAGATGG GCTAG

SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GGCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAAA GAAAGATATT ATTCAAGAAA AGAAGTTAGG AGCCAGGTGC
 AGTGGCTCAT GTCTATTATG CCAGTACTTT GGCAGGCCAA GGCAGTAGEN TCACTTGAGG CCGGGAGTTC AGAGACCACT
 CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAAGTG TTTAACAAT TAGCTCAGTA TGGTGGCACA TGCTGTAGT
 CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCTTGGAATT CAAGGCTGCA GTGAACCTAAG ATGGTGCCAT
 TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGTGTA ATCTAAGCTT AAATAAACCC CCCGGAGGCT GCACAATINC TTGGCATCTC TCCCCTGCCC TCTCCATCCG
 CATATTCATT TTGGAGTTTG GAGAAGTATC TAGAATCTNC TCCCACCCCA AAATGCCAG CAGAGCCCCC CCGCGCCCC
 CGCACCCCTT GGAGCTGCGG CTGTCTGAAT CGTTGAGATG TCTGANACTG TCGGGGTTC CTACCTAGTG CTTCACCCAG
 ATCACCTCAC TTTTGAGTTT CCTTCT

SEQ ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAAGACGAA GGAGGAGTAA AGGCATGINT CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAAGTGC CCCTTATGAA
 ACCCTCAGAT CTGGTGAGAC TTATTCATA CCATGAAAC GGCACAGGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG
 ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTGGG CAGGGACACA GCCAAACCAT
 ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT
 TTTTCCAGTT GTAAATGTTT CATCCAAAAA AACTGTGATT TTGGCATAAC TTTTTCAG AGTTGC

SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCTTTT GAGTGACTTA CTTTGAGTCT TTGTACCTT TCCTCTGATT TTTTCACATG GTTTAACTCA GTGTACCCAA
 GAGTACTAGG TGCACTCAAT TCTGCTATTA ACTCTATAAG CAAGTNCITA AGAAAGTIAA TGTTAAAAA TAATCTTAA
 ATTGCTTGA TAGGAAAAAT GTATTTGAAA TTAATAAAAA TTCTTATGTT GACTTCTTGG TTTTGAAACA ATGAATATA

SEQ ID NO:1153: (Length of Sequence = 275 Nucleotides)

295

CAACCTCCTC TTCAGTGTCA AAAAAGCCAC GGTTAGACCA GATTCTGCCC GCCAACCTTG ATGCAGATGA CCGTCTAACA
 GATGATATGTT TGTGTTCTC CTTCATCTC TAATAATTGA TTTACCATGT TTTTCTAAAA TACTTGTTAT GTCTTINCTT
 TAAGAAGTGA CATATATTTA TGTITAGTTA CTGTTATTCA AATATAGCCC TGACCTCAGT GCTAAACTTT ATAGTTGATT
 TTAAATCAA AAGTATTATT TTGTGGGACT TTAAG

SEQ ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT
 TTATATTTAT GCGCTATACA CATATATGGN CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAAGG ATAATGATTA
 CACGTAGGAT AAACATTTAT CAAAATTGT ACTATAAATA ATA

SEQ ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAACAAA CACTAAGCTA TTTTGAACA ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAATC
 CCAATAGGC ATTTTATAGC ATTAACCAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATAGCAT
 CTGATAAAG GIATGCTTCC TTTCATTGA NTACATTTCT GNACATGTAT GTTATAAAT CCAGGNAACA GCCAAACCAC
 AAGTTAACTC TTAACAATGA ATATACATAG TTAACCCAT AGTAAGCAGC CCGTTTGAA AGCACTGATG CACCCAACAN
 TTATATGGTT CCATTCATA AGG

SEQ ID NO:1156: (Length of Sequence = 396 Nucleotides)

CCCACCAATT GCCATTAAAC CTCCCAATCT TTAAGGGAG GNTCTCTACT TACTGTTTCA AGGCAAAAAG ATGATTAANC
 TATCTACAT GGTGTAATT TGGGCTTAA ATAAATGACT CTAGTGGTAG CATTTCAATG AGGCAGGTCC AAGGAAGACA
 GATTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCCCTGAC GGAGCCACAG
 CATGANCTCA TGTTCCTG AATCCATCTC AGTTCATGTG ACAGGATGGA AATGCTTCCT TTCTTAGCCA GTGTGCTTG
 TAACGAGTTC CTGCGAGCTC AGGGAAGGGA GCAACATGTA CTGCTTTGTT GCTTCCTGTA TAGAGAAGGC AGGAAT

SEQ ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGGTCTCA ATCCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG
 TGATCTCCT GCTCAGCCT CCTAGTAGC TGGGACCACA GGCCTCGCC ACCGCAACCA GCCAATTTT GTATTTGTAG
 TAGAGACAGG GCTTACCAC GCTGGCCAGG CTGGTCTCAA ACTCCTGACC TCAGGTGATC TGCTGCCTC GGCTCCCAA
 AGTGCTGAGA TTCCGGCGTG AGCCACTTG

SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTTATTAGTT AATCCACGG CAGATTTTCA TTTCTATCGA ATATATTATA TGTAGAACT AGGGCCTTAA ATAATTAGC
 TGACTTINCC TATTAGTTAT TCCTTAAGAT AAAATTATGC TGGTGAAAT NACTGNGAA TTTCTCAAGA AATTAAGCTC
 TATAGAGGCA TAAGTAATCG AAAGACTTTT

SEQ ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TTCTGGGAG TGTAAGCNC TCACCTGGAC CCCACAGCCA GTGAGCATTG GTGCTTATAT TOCATCCTCC
 AAAGCTCTTT CTTCATACCA GACCACACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA
 TTGTTTAGTG GTCTGGCATC ATCTATATT ACTTGGCTTG ATTTGGGATA GAGTATAATC CTAGTCTCG ATGAAAGGAT
 TTNATGAGT TAACCTTATG GSGTGATGGG ATTTATGGGA TTATTTCCAC CCTTAAATG ATTTTGTTGGG GAAAAAAGT
 GTACTAATCC CTAATTTAGG

296

SEQ ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAAACAAAT CAATTAACAT GATTATCCCA GACCTTTCCTT TCCTTACTGG AAAAAAGAGG GCATTAAACT GGATGATGAC
AATAACACCA TAACTACAAG CTTTATATAA AGTCCTTTAT ATACAGTGT AATACAGTGA AAGNTCAACC TTATTGAAAG
AGGTCTGGCT TCTGCCCTCA GCTACTGGGA AACAATCACT AGGCCTCTGG CATGT

SEQ ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCTTTAAA ACTACTTTGA ATCTTATAGA AACATCAGAA TCTTTTGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT
GGAGTGGTTT TTTAACTCAA GGATTTAGGA CCTTGGCTGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC
AGGACTTTAG ACAGAGTCAG AGTCCAGTTT GTNCTGAAAC ACAATTIGAT TTCAACTATT GTTTTAAGTG AGAGAGGAAA
GTGACATTAT TATGAGTGTA AATTTNCTGC TTTTAAAGTA GAAGTTACTG ACAATTGA

SEQ ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCTTGTA TATAACTAAT GCTTTGAGGG AGAAATTCAA ATGGCTATGA AAAATATTT ATAATTCAAT
GATAATAAAA ATCTTACACG TTAAACTTGA AGAATGTAGT TAAAGCAATA CTTGGNCATA ANCTTAGCAC ATATTAGTAA
AGA

SEQ ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAACACCA GGAGCATTTT ATTCAGATGT TAAATGAACC AGTTCAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT
GGCAGTGGAG GAATTGCAGA AGCTGGAAGT GGTCAATGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA
AAGGTTAAAG GCATTAGGAT TTCTGAAGG ACTTGTGATA CAAGGTATT TTGCTTGTA GAAGAATGAG AATTGGCTG
CCAATTINCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTT TATATCTCAC ACTTCACACC AGTGCATTAC
ACTAACTTGT TCACTGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEQ ID NO:1164: (Length of Sequence = 260 Nucleotides)

TGCATTCTTG CCTCTTGAC AAGTTCTGCT TCTTACAAA GGACTTTGCA AGTNCCTCAC CCAGACCATC TCACCTGTAC
CGAAATAACC TCCCCTACTA GCGAATGAGC AACTTTGGAG CAGAAAGCAG AAACATCATC ATATTCTCT TACTATGCAA
ACTGGTAGCT CAAACCTCAT ATGACCTCAA AAAACTATAA TTGCTTCAAC CTAAAAAGC TGATTGTAAA AAAAAA
NGCTGTGGTT GCACACCGT

SEQ ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGTATT TAAAAATGAA TATTAATATA ATGAAATGGN TTTGCCTTTT TGTAGGCATA ATAAGCCAAA TACTTTTTTA
CCCAAAATAA TTTTINAGAGA AAATGATGTA ATGAAAAATT GTACCATGAA TTAGGAGCAT AGTTTTINCC ATTTAAACGT
CACCATTACT TAAAAGATGA TTGATTATG CTATACCAA TCAGATGAAC TCTGTTATC ACTTTCTTNC TCTGTCCCA
AACAATTTGS TTCATTGAGA CTGAAATGTT TGTTCTTCA ACTTATTAGA ATGGAAGATA ATGCAGATAT TTCTGTGGGA
AATAAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTTGTCAA ATTINCCAT TTAAATGGC CAGGAAAAAC AATAATTATT TTCCTGATGC TGAGGTTTTA
TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANTGAAAG TAGTCATTGA
CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAATAT TTATTTTAA ACAACCACTT TTCAAAGCA

297

GTTGTGCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTGAGAA GCAGAATAAA ATATGATACT GA

SEQ ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TTGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NTCTCAAGA AGACAGTCAC
GCAAGAGACC AAGAGAAGAG CTAATCCAAT TGATGCAGGA GGAAGTAGAG CTTGAGAAAG AATGTCTCAA AAAAGAAAAA
AAAAGAAAGG AGTGGGTAA GTATCTGATG ANTTTINCAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA
AANNIGATTG ATAAATACAT AGANCATAAA GCAAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEQ ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGTTTTAG TGATGATTCA GTGAGAAACA TATTGAAGC AACAAGCACA GTAACTGGAA GCTGTAGGTA CTCAATAAGT
GTCAGTTTCC TTCTCTTCT AAAAGCTGTG CTTTCAAGTC AATTGTATGT CTAGASTCGC ACTGTCTGGT ACAGTGGCCA
GTACTAGCCA CATATGGCTC TCAAGTACTT TAAAGAGGGC TAGTCTGAAT TGATATGTGT CATACTGTA AAATACTTTA
AAGAGGGCTC ATCTGAATTG ATATATGCCA TGCATGTAAA ATACAAATCA GATTCTTAAA ACTTTGTACC AAAAAATACC
ATAAAATAAC TTACTAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TCCNTCTGTC GCCAGGCTGG AGTGCAGTGG CACGATCTTG GTTCACTGCA AGCTTCACCT CCCAGGTTCA
CACCATTCTC CTGCCCTCAGC CTCCCGAGTA GCTGGGACCA CAGGCGCCCA CCACCACGCC CAGCTAATTT TTTATATTTT
TAGTAGAGAC GGGGGTTTCA CCGTGTAGC CAGGATGGTC TCGATTTTCT GACCTCGTGA TCCGCCCCGN TTGGTGTCCC
AAAGTGCTGG GATTACAGGC GTGAGCAGCA ATGCCAGCC TTGGGAGACA CTTTGTATG CCACAATCA GGGTAGGGAG
GGCTGGGAAA TATTACTGGT GTGTAGTGA TCGAGGCCAG GGATGCTGCT AGACATCCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GTTTTAAAGC CTCIGGACAG AGCAGTATTT CGTTTAAAC TTTGTTTTTC TTAAAGCTT ACAGTGTTG GCTAATTCTC
CTCCCCTTTT TACAAGACGG GGGCCGAGG GTGGACACTG GTGGCAGGT AAGGGATACT GTCACTTTAA GAAGCCTGCA
GATTGAAGTG TAAACATGGA GAAATAGGG GCTGATTTTT TAACTGTGT GAGATATTAA CCAGCCGCC TGTATATAAA
TCAGGAAATC CAAACAGCGA TTTACACCGA TTAACACCCC CTTTATATAT TTTTACAAA AATACACTGA GAAAATAATC
AAACGTTTTT ATCTCTCTTG TCTTTTTTTG TTTTTTAAA GTGTCAAAG TCTACATNTA AATATAAAN ATTAAGATT
AAACTCTAGC CTTTCACTGA GG

SEQ ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCTGAATGGG TTGGTGAAAG GTTACAGGAG CAGACAGCCT CCACACCCAG GCTGCTCTTG GCTATACAGG CTACCTCCAT
CCCTGANTGT TGTAAATAGGA AAGTCTAAAC ACACAGAAGA GGAGCACAAA ACCAATAATT ATCACACATT CAAAATAAAA
CTAATCCATA AAGAAAAGTA CCAACTCAA CAAAGACAGC AATGCCTGAA AACACTGGGC TGTATCAGCA AATAGAACAA
AGAAAATAN GCATAATTAA AACAGTAGAA GGTGAAGGAT AATTTTTTAAA ANTTAGATAT CATATCTGA TTATTGAAAT
AAAAAACTTA GTAGAAAAGC TTAAGTGAAG AGGATCAAAC CTGAGGAGGA CCCCAGCAGT TTTG

SEQ ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAAA AAAAAATCT TTTAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANTACA
ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT

298

GGTTTCTCTG TAGCTACACC AGCTGTTTCAG AAAGCTCATT GGACCTGGTT TTGAAAATAA AACAAAGTTA AAACCCCTGGG
 AGGAGTTTAT GTNCAGTGTG GAGTACTCAG GCTTTCTTAT AAAGAAAAAA AAAGGTTATC TGGTACCAAA GTGTGCACCT
 ACAGACCCTC AGGTACTGCC CTGTGACTTC NCTGTATGAC ATCACAAGGC TGCCAAGTGC TGCTTTNCTA GACTAGGGAG
 TTGGTGAGGT TTTGCTAG

SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCTAAA TGAAATTTAT AAGAAATTG TGGGTTCTGC CCAAGATGAC ATCTAAATTG AAGAAGGTAC ACAGTGAGTT
 TAAAGGATCA ACGAGAGAAA CTTTTATTAT TCATTTCAC AAGAAGACAC ATTCAAGTATC TGGATTATCC AATATATGGA
 ATACTTTGAG TTGAAATGAT TAAAGGGTAA TCTTTAATCA TTAATTAACA AATCATTAAAT TAANCAAAAT AATATTTAGC
 AAATTAAGCA AGTNTAAAG GCTACATGCA AACT

SEQ ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAG AACTTTTAAAT ATAAACATTT CCAGAAATATA GACTGACCTT ATATCAGTAC TTTTNGAGAC CGTTTTAAAA
 CTATATATCA TCTAAGTTTA TTATAGACTG TTTCAATTTT CACTTTCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAAAT
 AGATTTAACA AAGAAAAAAT CAGTTTAAGN TATTTTCATAC ATATTCCTTG GNGAAAGCTG AGACACATAA ACACAGNAAA
 ACAACAATAA AATACCACCA AACTAACAC AAAACCAAGG AAAGAACTGN TTTTGTAAAC CTGTGTAATT CTGTCTTTTA
 AAATAA

SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAGTCAGGA TGGACACATT AGAAAGAAAC ATTTTAGTTT CAATGTTACC ATAAAACCAG AACGAAAAGC AGCATGCTGT
 ATTATATTIN NCAATTTAGG TTCCATTTCT AACTCCACCT AAAATGAATA TGAACAACT CATTTTTAAG TGTGTGTCAG
 TCAAAATACAA TAATAGTCTA AGTTTATTC CATATGTACC AACCAAAGCC CAATAAGCT AAAAGGAAGC CAAGTGTAAAT
 AAAAAGGCAG CTATAAGGTC TTGTGTTGA NTTTTTACCC AGCAAGAAAT AAATGATACT TAGTAATCCA TCTTTCCCCC
 CCCTGCCAT CCCTGCACAC ATCTAAAATA GCCTAACTTC ACCTATTCTA ACTTCTGAAA TTGTTTGGG ATTCTGTTT
 TACTTTCTCA GAGTGGATGG TATAGC

SEQ ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCTCA ATCTATCCC TTTCCTCTT AGCCATCCTC TCTAATTINT TTAACCTAAG CCTGTGTGTC CTCAGAAAAT
 AGGTTATGCT GTTGGTGTGT GTGGTTGTA ATCTATATAC ATGGNGTTAT GCTATGATT TTGTTTGGTA ATCTCCCTTT
 TTAATCAATA CTATATTTAT AAGANCCNT TAAGTGGTTG TATGCCTCTA CTTTATTGCT TCTGACTGCT GCATGGNATT
 CCATACTCAT GTCCACCACA CTTACTCATT CTCCCTCTTG ATGGACGCTG AAGTTGCTTG G

SEQ ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCCTC TGCCTCANCT TCCTGAGTAG CTGGGATTAC AGGTGCCTGC ACCACGCCCG CCTAATTTTT GTATTTTATG
 TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCGCCTCAG CCTCCCAAAG
 TGTGTTGGAT ACAGGCATGA GCCACCAAGC CCGGCAAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC
 AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGAA TAAAGGGGAA
 AATCTTGACG A

SEQ ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATTTTGG GAGAGAATAG TCATACCTAC TTAAAGAGAG AATAAATTGC CTTTCCTAAA TNCCTCTGCT TCGCTCCTTT
 CCTGGCGTTG CTCTGGAACC TTGTGAGTTA TATGTATGAT TNCTGTACTC TGATATCCAT CAAAGTGCAT AACATAGTAC

299

TCATGATGCA GTAAGTACAA ATCTTTTTTG AAAGAGATAT TGCTTGTAAC CATTITGGAT TTATAACATT GGCTTATAAT
ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT
AAAAA

SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTCCTTGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCATTTCAT TAGTCTTTCC
TCAAGAAGAT ATCAAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCTGAGGGG GNCCAAGGTA CATTATGACC
TTAAAACGAA CTCCTTCTCC ACTGGCCCTA TTAATCACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

SEQ ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTTGGG ACTTGAAATC TGTGGCCGAA GACNGTCAC TACATAACTT CAAAAATAAT CAACCACCCT CCTTCCCAA
ACCACCCAA TCACTCATC CAGCGTTTAC TTTTTTGAAT CCCTCAGAA CTTTTINCTG CGACCCCCCT CCTTAAATGG
AGTTGGGTGG GGGGGAATG AATACTGAGT TGGCCTTAT TTTTAAAG ACTTTTGAT CCAATGAGGC CCCCTAAATA
ATTGAGTTT GGGTCTGGT TGGTTTGT TATTTGT

SEQ ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACAGCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA
CACACAAATC ACAAANCTG ACTCAAGGAG AAATAGAATA TCTCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA
ACCAAAAGCC TTCCAACAAA GAAAGCCCN GGANTAGATG ATCTTCACTG ATGGNTTCTA CCAACATTT AAGAAAGATT
TAACACTAAT TCTACTCAA CTCTCCACA AAAAATATGA GAGAGTAGA GAAACTTTC TAAATATCT TATGAGGGCA
GCATTACCGT G

SEQ ID NO:1182: (Length of Sequence = 345 Nucleotides)

GTGTGINTAG AGGGATGGAC AGGATGCTGT TTATTNCCC TTCTTGGAA ATGGACCTTC TGTCCCTTCC ATTTGGACAC
CACAGTGGAA GCTGGTGGCC TGGAAAGGAG GATTAGGTCA TGGACATTG AACAGGTGCC TTGGGCATGA TGTATAGATG
CAGTCATATA TACCTTGCTG GGNITGGGTG CCACCTCCAG TGNCAGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG
ACCCCATTC TATCATGA CTCCAACAG TTTTINATTG TGAAGAAGA AACTTINGCA TTATAGAGAC ATCATCAAA
AACAGTANAA ACAAATCAA CCTG

SEQ ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC
CAAGGCCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGCGAC CTTAATGGGA
GGCCCCGGGA GGCCGAGGT CGGTCTCTCT GTNACGAGGG TGCAGGTATC TITGGGGACT ACATCGATCG CTTGGACGAG
CCCTINTCCT GCTCTTATGT GCTGACCAIT CG

SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTTTGCA AACTCAGTTG ACTCACCTCA NATTTGCCAT TCCAATTACA GGGCTCGAA AGAGTCAGCA CTCAGCCTTG
CTCAAGGNTC AGATTTAGGG GTTGCCCCC GNCCTCGCAA CCTCCACCT ATTGTTTCAA ATGTCTCAA GACAATCACC
ACTGTATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCTTGAGA ACTGTGTCTA GGTGGGGTTA
CTTTGAACCT TAAACCAACC TTGGNCCCA AATCTGCATG AGCAGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG
ACATTTTCC CAACA

300

SEQ ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGCG GGGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAAC
 ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAACTT TTTAAAGAAA
 ATTTGGTAAT CTCCTAAAGT ATTTGTATGG CTTTGAATGG GTGINCTTTT CTAACCTTGT TTTAATTTT ATGATACACT
 TATAATTGTT TCAAATAGGC ATTTGTNCAT TTTAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT
 TTGGACAAAA AAAATGTGTG AATGAGTGAA ATGCCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTTTCAGCC TGCNAGCCTT
 CTTCCCGGGG CGCCATAAAC GCCCCCAATT TCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTNCGTGCA CGCAGACGGG
 AAGGGCTGGG GAAGCGGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGGTGCTTC TCAGTTCCAA
 GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT
 TTGAGCAGAN CAAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTCATAGA TTT

SEQ ID NO:1187: (Length of Sequence = 365 Nucleotides)

TCTTCGCAAT TCTGAATAAA GTTTATTAAA TAATATGTAC AGCAAATGTA GTAATTCAAC ACATCTATTT ATCAAATCAA
 TCCACTGCAA TGAAGAAAAA TAAATGANCA GAAAAATCTA TGCTGCATA GGCATGCTC TCAGTGTGTA ATTTAAATGG
 CAATACTTTA AATTAAATGG TTATATATAA TGTCAGTTAT TTTCTTTTCA GAATATAACC TTTTTGTAG TAACCTATTC
 TAGCAATAGG GCTTAATACG NCTGCAGATA AATAGGNTG CAAAAACCAA AAACCCAAAA TAATGAAATT NAAAAGGGGA
 AAAAACTGT AACTGNGNTC AGAGTTACCT TTCTCCCCC ATAGG

SEQ ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATGGCT TACATTTATT TTAAATTTCA CTAAATACAA ATCTTGATTG TCATGCCAGT TTTAGATCTT ATTAATTINC
 AGAATGGATA AATTCAAATA ATCATAAAT ACGTAACTT TTTATTATAC CAAGGTGTTT TAATGCCATC ATATGANGAC
 AGATGCTTCA AACAACTGCT ATTAATATAT ATTTNNAATA AAATTAATAT CTATTTTAA CCTATTTGTA GTCACAAACC
 GAAAACGTGT CGNCTTTACC TTAGAGCTAA AGGCTTACTT TATGCATACG GGATATTTAA TAGTCTACAA ATCAAAGGTT
 TAAACAGNCC CTTAAAAATT CCATATATTC

SEQ ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACCTNC TCACTTCCTC AAAGAAGAGT AGTGCACTAA AAAGAAGGTT GCACCCGGAG AGCATGTAAA GTGTCTCAAG
 GGGGACATCT GAAGTNCCTC GTTCCAGGG AGCCCACTGG CTCTGCACAA GTAATCTAAT GAAAGCTATG CATTCTCTCT
 GGGCTCCTCA TATGAAAAAN CCCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC
 GATAAAGACA GCTCAAAAGT CCTAAGGCTG CTGACATGAA CCAGATAATT GGTGGCTACA GTTGTGCTG CTAAGATTTG
 GGTGCATGGG GCTTCGCTTT GGTAGCTCC CATGGTCTTC TTTTCCAAA AAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGTGTAACA TTCACATATT TAATAGTACC TTTAAATATA GCATTACTAC ATTTAAATG GTTCCAAAT GAATCTATAA
 ATGGTAATAT AAATTAAAAA ATACGAACCT AAAGTGAATA AATTTTAAAC CTTAGCTATG GTATAAATA TGGTAAATG
 ATAGTGATCC INTGAGTCAT TAAATGTCT TAAAGATAA CAGCTTGTTA CCAGAACATT AGANACCATA GCCATGATTC

301

TCAAGCGNTA ACAATCTACA TTGNTATTT NCTTGGCCAC TGCACTCTTC AAATGANTAA TAAATTTCCA GAATTCCCAT
TCCCATGGTG TTTTCCCAA TAGANCTTTT TCACACTCGA TGTG

SEQ ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCCGGAGAGC TGCCTTCCTC TTCTACCACG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC
ACCAGACATT GAATCTGCGC TCCTTGAAC TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA
AACCAACCTG TCTATGGTAT TTNTGTAGC AGCCTGCAGC TCTCTATCAC TCTTGTATAT AAGAGGCTGA AGTTTACTTT
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCCGATT ACAAGATGAA AGTAAACAGA ATT

SEQ ID NO:1192: (Length of Sequence = 315 Nucleotides)

ACTCCAGCCT GGGGAACAAA CAAGCAAGAC TCCATCTCTA AATAAAAAAG AGTGTCCCC TAAGATGCTC TGCGAAATAT
TGTAAGACTGG TGTCTCTCTT GGATGATGTT TGCCGTCAGC ATTACCAA TAAACTTGCT CTCTGGGAAA AAAAAAAAAA
TAATAAATAA AATAACAGT AAGAAACACC CATAAANCA ATTTCTATGC TCCTGCAGCC TCTTTTGGC TGAGCAAGTG
GGACCTTGGT ATACACATCA CCTGINCTIN CCTTTTCTT TGAAATGTTG TGTGTGCTGT TAAATTGGGA TTGAA

SEQ ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTTGAGG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT
TCTCCAAAAG CAAAACAGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTCAGGAC CAGGTGGTAT
GCCGTINCTG AAAGTGAGAC ACATGCCCCA GGGAAAGGGT AATTTTAAAA TTCTTCCCAT AGGTCTCAT CCTGTTCTC
TGCTATGTCC AGCATCCTIN AGTCCAGCT GCAGGGCCTA TATTTAAATA CCTCATGCT TTATCGCTTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAG CAAGTNATTT TNAAATCCAC GAAAGATGCC TACCTTGNT CTNCTCTGG TCCTTATTAG CCACACCTCT
CTTGACAGGC AGAGGAGTTA GGAGTGAGGG GATATTCCCA CCAAGACCCT ACAAAATGCA CTCTTAGGCC ATGCCCTGGG
TACCCAACT CTAGAATTCC CTCTCAAAG GGACCTTAAC CCAACTTCAG AGCCTATATA GGCCAATTCC TTGGTCCATT
TTCCAAGGGG TGCNCAAAG ACAACCATTT TNGGGAGGNN GANGGGAGTA GGATGAAGCT TTGCNACGT GGGTCTTGGG
CAAATCCAC ATATCCCGGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATT TTTTTTGAA ATGGAGTCTC GCTCTGTTNC CCAGGCTGGA TTGCAATTNC NGATCTCAA CCCACTGCAA
CCTCCGCCTC CGGGGTTGGA GOGATTCTCC TGCCTCANCC TCCTGAGTAG CTGGGACTAC AGGTGCGCGC CACCATGCC
AACTAATTTT GGTATTTTGA GAGACAGGT TTCTCCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

SEQ ID NO:1196: (Length of Sequence = 291 Nucleotides)

CCATGCTTGG CTCAGGGCCT GGGGCGGGT CCTGGGTAGA GTCTAGCCC CAGAGCCCCA GCGGCTCATG TCCTGCCGCC
CCTCACTGAC CAGACGATGA TCGGNAACCT CTTGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATTNCCAA
GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAGGT TCACATGGTA
CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGCGCGG TTGTTTGAGT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GGTCAAAATA TGCAATTTAA AAATAAATAT ATCCATTINC CTATTCTTAC ATTTATGAAT
ATAAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT

302

TANTTTAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT
CAGGCTTACC ACCTGATTTT NTAGGATAAA GTTCATTGNA AACACAGTTA CAGTGTCTTT CCA

SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTTCT TCTCATCTTT TINATGCTAT TATTGTCATA TAAGTTACAT TCCTATACAT TGTGTGTCCA ACACAAATTT
AAAAATTATGC CATGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTTG
CCTATGCAGT TACCTTTACC AGTGTTCCTT ATTTCTNCAT GTGGATCTGA GTTACTGTCT TTNAACTTCA ATCTAAAGNN
CTTTCAGTCT GAAAGACTGT AATTTNAATT TCINGTAGGG GTAGGTTAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

SEQ ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTIG GCCAAGGCCA TCCGGAGACT TGTCTGTCTG
GGTCAATTTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTTCNCAGT
GGGGCTGTTT CCAATGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA
CAAGTT

SEQ ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCIT TACAGTGTGA TTCCAGTTAC AGAGAATATT
CACATAGGTG CATAAATAAA TGAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TTTTTNCTA
CTTTTNAATT TTNATAATTC CTCCAGTGTG TTGGTGTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA
AACCCCCCAA ATCTAGTGA TTAACAACAA ACCATCTTAC AATTTTNNYC AGAAGTGTCT AAGGCTGGAT ATTTTACTGG
GCTCTCTCT GAATGTGGGG G

SEQ ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTTINTA CCCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA
TTTAGAACCT ATTGCAAAAC TGGGCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG
AAACCCCTCA ACCTCAACTA TGCCCTCATA GACACACACG TTCATGCACA TGTAGGCACA TGTACCATCT CACATCTTTC
ACTTTCCTCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGCACT ATACCTTTTT GAGCCCGAGA GA

SEQ ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAAATAGC CAGACTG3GT ATTATGCATG TAACAAATGA GGACATTGTG CATAAGAAAG GAAACATTAG TTTTCTGTCA
TCTTGGGCCA AGTACCTCAT TACAGTAAAT GTGTGTCTTT GGAAACTCTT TGCTGTINCT GATGGCGGTA AGCATGGGGT
CCCAGGCAGG TTCAAAGGCT GAACGTGAAG AAATGGGCAA GACAATACAT TTTGTTTTGG AAGGAATTTT TCATGGGATA
AGTTTCCCAA AGCTTGAATT ACAGGCTATG AAATAAGCA AATAGATGGA GGAGAAAACA AGTATTGTTT TCAAAAAGGT
ACCAAGTCAA TTCTATTTAA AGGA

SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTCTTTATC TTCTCTCT TATGTCACT ATGTAATGTC CTCATCATTT TAAAAGTGAG TTGCTATTGG GCGGGCGCGG
TGCTCACGC CTGTAATCCC AGAAGTTTGG GAGGCCAAGG TTGGTGGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCCTG
GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC
AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC AGGGAGGCGG AGGGTTNCAG TGAGCCCAAG ATCGTGCCAC
TGCACTCCAA GCTTTGGGGT GACCAGAANC GAGACTTCTT CAAAACAAA

303

SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTTTAGAA AGCCTGCCTT GGCTGGGCCT GGTGGCTCAC CTCIAATCCC AGCACTTTGG GAGGCCAAGG TGGGAGGATT
 GCTTGAGCCC AGGAATTINA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCAGG CGTGGTGGCG
 CATGCCGTGA GTCCCACTA CTTGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGGA CGTGGAGGTG GCAGTAAGCT
 GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCCTGTAT CAAAACAAA CAAAAACAA AAACCTGCCT
 TCTNGGGATT GGGCTTCTGG GTTTTT

SEQ ID NO:1205: (Length of Sequence = 292 Nucleotides)

TACAACGAGA CACTTGAGCA CACGGTACA CCCAGACATC TTCGGGCTGC TATTGGATTG ACTTTGAAGG TTCTGTGTGG
 GTGCGGTGG CTGCATGTTT GANTCAGGTG GAGAAGCACT TCAACGCTGG ACGAAGTAAA GATTATGTT GTTATTTTTT
 TTTTCTCTC TCTCTCTC TTAAGAAAGG AAAATATCCC AAGGACTAAT CTGATCGGGT CTTCTTCAT CAGGAACGAA
 TGCAGGAATT TGGGAAGTGA GCTGTGCAAG TCCTGAAGAA GGAGATTTGT TT

SEQ ID NO:1206: (Length of Sequence = 336 Nucleotides)

TTGCCAACAC AGTGTGTCAT GTTATTGGG CTATTCACAG GTAAGCTTAA AATACAATGA AAAGAAAAGA CCAGACGTCA
 TCAGGAATGT CGAGAAACAA AATATTTAGC ATTTCTTAGT TTCAAATGTT ACCATTTTCAT TGCAGCTGAG GAATATAGGC
 CATTCGTTGA CATAACTGCA ATGGGTGAGA CTTATTTTTA GCCACAGGAA GCAAATACAT TTAACCAATG ACTTTTAGGA
 CAGGAAGCAA AAAAGAAAAC AATATTTTCA TGTAGCAAGG ACAAGANAAT CATTTATACA AATTAAAGTG GATATTAATA
 TACCATTATA AAGAGG

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TGCCTCANCC TCCAGAGTAA CTGGGATTAC AGGCGCCGCG CGCCACGCTT GGCTAATTTT TGTATTTTGA GTAGAGATGG
 GATTTINCCA TGTTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGCTGGG
 ATTACAGGCA TGAGCCACTG CGCTGCCTC CATTTCCCTT TTATAATTCA TCCCTGAAGT CCCTTAAGGT AGAGAAGCTG
 TTTGATCGTC CCAGCCCCCTG GGAGGCTGAA AGGTAACTTN ACCAGCTCCA TGCTGAGTT TAGCACCTGC TGTGCCAGG

SEQ ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGTTTA AAAATGAAGT GGAAGTTTTT TGTTTTTGT TTGTTTTTGC AGAAAAAAGA TTTTAAATGG CTGAATGTN
 CTGCCATAGT TGCTCAGAT TGTGAGAAA TTATGTTGA CATCTGAGAG AGAAAAAGAG AGCCTTTTGA GGAGCTGGCG
 TAAATTAATT TTTTGTTTGA TCTCTTAACT CTTTGGCTTG AATGAGTCAT TGACTTTCTT TGCCAAGATA GGGTTAGCAT
 TTGTTTTGTG TTTTAAAAGC AGGCCAAGGG ATTGCCACGA GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTCTTAGA
 AATTGTTT ACCAGTTGTT TTAGTCTGAA TGTGATT

SEQ ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCCAAAG AAATCAGACA AAGTAAATTT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT
 TAAGCATTTA CTATTAAACCA AAGAGTTGTG TTCACATTC AGATAAGTCT ACGTGGAAAA GCAITTCAGAA TTTACTAGGT
 TTTTNCIACA TCACTATTTT ATCTACAATA GGGACAACAA ACTGACACTC AGGATTTGAT GGGCTCTCAT TACAATGCTA
 TACATTTAAC AGGNCNAAAC ATCAGTGAAT TTGAGGAAAA AGTTATAAAA NGACCAAAAC CACCCACTGT AGGATGGGCT
 CTTGATGTT ACTGTACAGC GTGGGTCAAG GTAACAAGGA GG

SEQ ID NO:1210: (Length of Sequence = 349 Nucleotides)

304

GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGGAGAGC TGCTCTTTTT GCCGCAGCTA CCACTTCCCC
TACTCCCGA ACTACAAGAG GTCGTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG
CACCAGTCCA GAAAGCTAAG TGTGAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCCA GGGTATTITAA CACTCGCTGG
TACCTGGAGA AGCACATGAA CGTTACTCAT AGGCGCATGC AGATTTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG
TGAGCTGTCC CTTACCAGC AACAGACT

SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTTCAGG GAAGAGCTTT ATTGCTTCCA TGGGGGTGGC CTGGGACGGC TGCCACAGCT TGGTAAGCT
CCTTGGGCTT CANITCCCTT TGGTCCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGTNT TGTGTCTGAA ACCTAGAACA
TGTGGCAAGT TGGTGAGTCC GGGCCTGCGG TAGTCCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC
GGANTGGCG TCACCCCTCT GAGCTTTAAA GTTCTTTCTG CTATAGCCCT GGGCGGTCT. TGTTCGCTCC GAAGGAATGG
GCTCCAGGGT TCCCCATGG GACA

SEQ ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TGGTATTTTC ACCATCCTCT CTGAAAATAA ATACTTTGAC TTGCAGTAT TACTACTTCA TCAGCATTCA
ACTCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAAGCA TTCTAAAAAT AAATTTCTATT GGTAAATTAG
GATATCAGAT GCTTCCATTA TAAAAGCCTA TCCTATTCTG TACTCTCAGT TGGCAGTCAT ATCCAGATCT CAAGCTACTC
TGGCTCTTAT TGAACAAGAA CCTATTCCAG GNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA
GAGGCAGAAT TGCCACATA CTCTNGCAGG AGTTAAATAA CAAT

SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTTTTG TATTTTTAGT AGAGACGGAG TTCTACCATG TTGGCCAGGC TAGTTTCAAA CTCTGACCT CGGATGATCC
ACCCGCTCG GCCTCCAAA GTGTGGGAT TATAGGCATG AGCCACTGTG CCCGTTACT TTTTCTTTT TTTAAACACT
GAAATTGCTG TATCTACCAC ATTAACATTT TATTTAAAAA AATTGTGTTA ATAGCATATG TATGTAAATT TAATATTAT
ATACCTCTTT TTTGTCTCTT CTTTAGGTGG TTGAGCCTA GGGATACTTA CTTACTGATT TT

SEQ ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATTTTNC AGACAGGTTT ACAATGAAAA GGCTAGGTAT TTAGCCACCT CAGCATTGAT TAGTTTGGGA TGTCTAAGCT
CTGTTACACA TGGCTTCCA TGGTTTCACT CTACAAACA TATTINCAAC GTGAAGGNTA CATCTACAAG AAATCTACAT
TTCAAGGGTT TTACAAATCA ATCTGTATC TTCCCTTGA ATTGACTCTC ACAGACCCCG TCCCCTTGTN ATTNCCTTTG
CCCAGCTTAA CGTCCAAAG TCTACTTAAA TGCAGCTCAA AAATGTTAAG ATTGGGCAAC AGATTTACAG TTCCTGT

SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGTATT AAACAATAT TCTGTACTT GANTTAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAAATCCA
ACACTTTGCT AGGGTTAAGT GAGAGGTCA GCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA
CAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGCAATGN CTGTGNNCC AGCTCCTCGG GAGGCTGAGG CTGGAGGNTC
ACTTGGGCCC AGAAGGTCAA GGCTACAGTG AACCTT

SEQ ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCCTGCTCT TGCAATTACC TCCCACGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTGTGA
TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTTCTACTGC CAGTGTATGA CTCTCTTCTT TGTAAATGTC
ATATGTAGGG TTCTGTACAC AGGACATTTT CTTCAATTGA GTTCCTCAGA TGCAATTGAGC TCTCCTGAAT GACTTAGCGG

305

GGAAGCTCAG TTGCAGCTGA CCGTATTAAAG GGTCCTCTCC CATTGTGCTG TGCCCGCTCG TTAGCGTAGG ATTCTGCCCC
CACGGCCCTT CCGTCTTCT AAGGGCTTGG CTTT

SEQ ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCAGCT TTGCTTGT GTAAACAGCT GGCAGTGGT ACATCTATAT TTGTTAAGAG GCAGAGCACT GTATTTTGTG
TAAGATAAGG TGCTAGTCTT GGCCAGGCTG CCAAGCTGGG GCTNTTTAA ATAAAAGTTT TAAAGAAAAA TTATAGCATA
ATAAATTACA CAATTTTATT GGAAACTGA AGGTGTTCAA CCAATGCTAG TTTTAAATA TATTAGAAA TACTATTTCA
GGAAATTTTA ACTACACTCA TTAGTCTTAT GG

SEQ ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTGCCCAGG CTGCAGTGCA CTGTGCAAA CGGGCTCAC TGCGCCCA ATCTCCCACT CTTAAGCAAT CCTCCACCT
CAGCCTCTG AATAGCTGGG ATTACAGGTG TGCACTGCCA CACCCAGCTA ATNCTTTAA TTGTTTTAT TTTTAGTAGA
GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAAGT CTGGCTCAA GCGATCCTCC CGCCTTGGCC TCTCAAAGT
CTGGGGTAC AGACGTGAGC CACCATGCCT GGGCCTGCTC A

SEQ ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTTCTCTC CCTCCTTCCC TTTATTGGCA CTGCCGGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC
ATGGAACCGG TTGGGGATCC ACAGGAACGA CATTCATACA GGGACATTIN TGAAAGCAAA GCAAGAATGA NTGCTTTCCC
GATCTCAGAC TGGCTGGATT CAGATCATTG TTTTGGCTGG TTCTCATTTT AAGGGGTAAG CAGTTTGCTA T

SEQ ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGTCACTCAG AAACCTACTT TGCTACAGC CTCATTATTG TTTTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT
TTGCCATAA TTINCTAATT TTCTGGCCA TTGCTTCTCT GTGATTGAA AATGTTACGG TAAGTGCTTA GTTGGAAAC
TATACTGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCCATAA CATAATAAAA TGATGCTTTT TTTAATAAGA
AGATCATACA CATTTTATTA TGCCCTAAAA GATGAACATT CAAAGTTCAC TTTTCTCTG TTTTGATATG ACGGATATAT
ATCAGTAAAA TAAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC
AATGTCAAG

SEQ ID NO:1221: (Length of Sequence = 396 Nucleotides)

ATCTGAGATA CTTTGTCTC ATGAATAAAT TAGTTAGTAG AATCTAATTT CTAGATCCTT CATAATGGTA ATTGAGGGTA
AAAAATAATA ATGTAGTAGT CAATTTIAGC CCTTTAAACC TATGGGGAAC TGTATGAATA ACTGTTTGAA ACTGCAGGGT
AATCCTGTCA CACTTGCAA CACATAGAAG CAACAAGACT ATTCTCTC ACACTTTAA TTAAATAGT GCGTGAGTAG
ACTTCCAGGG TAAGGTTICAG AAATTINCTT TCTAATTTCC CTGTTTAAAT GACCACTACT TTTAAAGCTA TCGTGGGAAT
TCACTTTCAC ATATATCTAA CTTACAGGAA ATTTTGAAG AGCCTAAATG TCTATGGGTA GATTCATGT TTCTT

SEQ ID NO:1222: (Length of Sequence = 350 Nucleotides)

GTATTTNTTT CTGGGTACTC TTCATGGCCT GCTAGAGAAC TTTACTAAAT TATAGTCCAG TAGCTGGACA GAGCTGCATG
TGTATTGTCT AAGTCCACCT GTGCTGCTGG TCAAGATTAT TTGTCAGTGT TTGGTGGTGT TGAAGAGGAA TACTGTTGTG
AAGGCTGAGT CAACTGCATG ACAATNCTCA TGGCTCACTG GCTGATGAGT TGTGGCATGA CTAGAAAGCT CTGCTTGTAT
TCCAGATGA CAAGTCACAC CTGAACAGCT GGATACTACT CGCATCCAAT TTGCTTCAA GTTAACATAT TTNCAGAAAA
TATTTGGATT TGGAGTACAT ACAAATATT

306

SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANTTTATCT ATAGGCCAAG TTAATGACAT AACTACAAAG AAATGACTTG TTTCACATGT TTTAAACCAG
 TGTTTTGGCT ATACTAACTT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA
 ATTTTGTAGT TGTAAATATTA CTATCGATCA TTTTGTAACT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT
 NTTAATGTTG TTAGGAACCA AGGCTATCAG TGTAAATGA AGGAGTTACA AGCATAAGAT TGANAGACGG TAAGTAAAAA
 GCTCATTAGT ATAGTTCCTA GTTTAACTTG TCAGGGATGA GTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCTGACCA AATCAGACTA AATCCTANIA CCTATACCAG AGTTATTGAG AAAGATAAGN TTTGGCCTGC
 NGGCCTTTGA CAGTGAAAGG NNTAGGCIT TGGAGCTCCT CAGGGCCACT GCTTCAGGA ACCTTGCTGA CAGTGAAGCC
 AACACAGATG AAAGCAAGCC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGGCAGT NAGTATGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTIN CCATGGNACT NTGCAACCCA
 CGGATTAGAA GATCCCACTC AGGAACCCAC GNCCTGGNA CCTAGAATGC CAACCCAGA GCTGCACAGA TTCTAAACAA
 CCTCTCANCT GGAATCTGCC TAACCCCTGCA GAGCTCCTGC GGGGAGGGGT GACCACTGCC ACANCTGCTG CTGCTGCTG
 CCTAAGCCAT TTAA

254

CAAAAAGTGA GAAACATG TAAACGTAAG TNATGAGTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCACA
 ATTTTCACT GCCAGATCTC TTGCTTTAGT CTTTTNCT TATATTTGGA GAAACAGAAG AGTTTGACAT AAAAGTCCCT
 TTGAGGATGT GAGGGTTGCA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAGCA ATATTTACAT GTTTTGTAT
 AAGACCAAAA ATATTTCCCT AAAAAGTTGT TAAAGTTT TTAGTCTAT AAACACTCAC TTTTATAGGG CACATGATTG
 TCTGTGTGAC TTCTCTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GGCATCTGTT TTTTGTGTTG TTTTGAATA GAGTCTCACT CTGTCGCCAG GCTGGAGTGC AGTGGCGTGA TCTCGGCTCA
 CTGCAATCTT TGCTCCCGG GTTCAAGCGA TTCTCTGCC TCAGCCTCCC AAGTAGCTGG GAGGTGTGCA CGCCACCACA
 CCCCCTAAT TTTNGTATTT TTTGTAGAGA TGGGGTTTCA CCATATTGGC AAGGATGGTC TCAATTTCTT GCGCTGTGA
 ATCCGCCCCC CTCAGCCTCC CCAAGTGTG GATTCCAGG CGTGACCAG GCGCCCGGCC GGNATCTGTA GATTTTAAAA
 GGCCCCAGTG GTTCTNATGC ACACCCCCAG AG

SEQ ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTTTTCCTA GATTGAGTGA CACTATTGTA ATGAGAATCT TCACTGGAGC ATCAGAAGAA CTGATTTCAA GCCAGTTTTG
 TTGGTCAGCA CGGTCAAAC TTCAGAAGAA TCTGTGCTC TGAGGCTTTC CAAAGCTTTG TTCCCCAGGG CAGTAACAGC
 TTCCAGTGTG GGCAGAGTCT TTAGTATTAT CACCAGGGCA GCTGCACTGT GGCCTGTAGC CATCTTCTC TTTTAGTACG
 ATCCACCTG TCAGACTTCT TGAATTTGCA CTCAAAATTA GAGCCACAAT CAAATTATCA GTCACGNTGT TTATTTTGT
 CACCAGAGAA AGGACAGAGT CTGTTTCAGC AGAGTTTGA GCCAGTACT GATCTCTCT CAGCAGG

SEQ ID NO:1229: (Length of Sequence = 366 Nucleotides)

307

CTGATAAGGA GGTAAATTTC TAGGAGCTGC TAAGATGGGC ATGAGGNTCA AACTGCAAAG CACCAACCAC CCCAACAACC
 TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG
 GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC
 CTATGTGGTG GACTTCATCA CCCCTGCCAA CTTTINAGAAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC
 TGATCAATGT TGGGGTCATC TACGAGGTAG CTGAGCGTCT GGGTAT

SEQ ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGTTTTGAG TGTGGGAAAT CGTTTTGCTG GAGCACAAC CTCATTGAC ATGCCATTAT
 CCACACTGGA GAGAAGCCCT ATAAATGTAG TGAATGTGGA AAGGCCITCA GTCGCAGCTC GTCCCTCACT CAGCATCAAA
 GGATGCATAC TGGGAAAAAT CCCATCAGTG TAACAGATGT GGGGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCCTT
 CGAGAACTIN TTTTAGGGAA GGACTTTTGT AATGTAACCA CTGAGGCAAA TATTTTCCA GAGGNAACAT CTTCTCTG
 ATCTGATCAA CCATACCAAA GAG

SEQ ID NO:1231: (Length of Sequence = 406 Nucleotides)

CTCTCGCCGG GCAGCTTGA GAAGGCGCAA TACTCTCCAG CTCCACCGTT ACTTCAGCAT GGCTGGGGAG GCCTTGGA
 ACTTATAATC ATGGTGGAG AGGAAGCAA CATGTCCTTC TTCACATGAC GGCAGGAAGG AGAAGTGCTG AGCAAAGGGA
 GGAAAGCCCC TTATAAAACC ATTAGATCTT GTGAGAACTC ACTATCATGA GAACAGCATG AAGGTAACCG CCCCATGATT
 AANTTACCTC CCATGGGCTC CTTCCGCAA GACGTGGAGA TTATGGAAAC TACAACCTAA GATGAGATT NGGTGGGGAC
 ATAGGCAAAC CATATCAATG TACATGTGTC TTTATGGTAG AATGATTIAT ATTACTTTAG GTATATAGCC AGTATTGGGA
 ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCAGAG GAGAGACTCT TGGGACAAAT AAATATTTAA AAGCAGTTGC CTATGAGAAA ATGGAAAAAG
 CCACAAGCAA AGGTAAGATC CATGCTCCAA AAAGGCCTGA GAAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAGCTT
 AGAACGAATA CCAAGATAAT AGCAAAATC CTCCCTGGAA AAGAGTCAGT CTGCAAAAAC CGGAAAAGGA GGTGTGTTTT
 TCCACAATGC CTAATTTCTA ACAACAACAA CAAAACTCA GAAAACATGG CCCAATAAGT GGAAGAAAAT AAGTGACGG
 AAACCTTCCC CGGAGGAAAC ATAAGCTTCA GGCAAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGTTT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGTAAAAGA AAGTTCCAGT GACTCTGGAT
 TTGGTTCIAA TTTAATGCA ACTTCTTGAT TGAGTGCAAG GTCAGCACTA CTTGGAAGTG GCTTTGGCGT TTCANCGGTG
 GGTAATGGAG ACATTGCCAA ATTTATATTC TGTAATTTTN CGTTGGGTGA GGGGAGCAAT ACATCATTAT ATAATGGTAC
 TTCTCAAGT TGCTGGTCAT CAGTTTCTGT GTCTGTGCTG CCAAAATCTA AAGATATGAT TGTNTCTCCA GCGGCTGGGG
 CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEQ ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCIT TATGTTTGA CTTTTGACT CAACAATTTT TTTAAACTT TTTGTTTTT NCTGAAACGT
 TCTGTGTGTT ATGAGCCTTT TGTTTTGINC TCGTTAAATG CACTCGACCC AAAATTGGTT TGGCATATCG AAAAGGAGAC
 CAAGGAGGGA GGGGCTGGGG CGTGGGAGGT GGGGAGGAGG CCCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA
 TAGAGACAGC CAGAAAGACA TGGGGAAGA GTGTTGGAGA CAGAGAAAGG GGAAGGCAAG GGAAAGCCAA AAG

SEQ ID NO:1235: (Length of Sequence = 386 Nucleotides)

308

CTCTCTCAGC ACAGCCTGGG GAGGGGGTCA TTGINCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
 CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGCTC TCTCCACTAC
 CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
 TTATCCTGCC TCAGCCTCCA AGTAGCTGGG AITGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTGTAT TTTTAGTAGA
 CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAT GATCTGCCCA CCTTTG

SEQ ID NO:1236: (Length of Sequence = 401 Nucleotides)

AGGATGTACT TCTAGTAATG TCACTGAAAG CAGATATCAA AATTCATTAC CAGGAGTACT TTGCTGTGA ATGGTTCTCTG
 TGCCATACAG AGATAAGATG GAGTCTTTGG AAAGTTGTTT CTTTGCCACT TCTTCTGATT TINTAGTTTG CTCAGTGAAT
 AAATCTAGAT CCCAGATGT TACTGTAGAC AGGGTTGCAG CTGCTGGTGC AGAGGGTGTG CCCTGAGACA AACACCAAAA
 TAAGCTATCA AATTCTGCAT AGTAAAGCGC ANTTAATCCA TTAAGTAAAA TCCAAATAAA GTTATAAAAT TAGATAGGAA
 TCAACAATT GTAGAAGGTA AAATGGTGCC ATTCAAGAGG ATCATTACA AGCCAGCCC ATATAAAACC ATCTACAATC
 A

SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CIN¹TCITCA GTGGATTAT AGAGTTGGAG CAAATGTCAT GATGANCITT NAGGCCTAGG CCTGNCCTCT
 TGAGGTGIGT GTG.GTGTGT GTGTGTGTGT GTGTGTGTGT TTCTTTCTCC ATAATAGTCC CAACCCATAA CAGGGGTATG
 GCACAGTACT TCTTATGAAC AAAAGTGCTA TTGGTCTACA AGGGGACTTG AGCCTGCACT AATTGTATTT GATTAGGATT
 TTTGTGCTGT CTGTATGATG TTAAACCACA CTGTCAATTA CAGACTTCCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA
 TAAGAGTTTA AATTAATAGT TTNCTAGTTT AATGACAGCA GTTGGTAAAG GA

SEQ ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAAATT CCAATTATTG TAAATGTAAA AGAAAAGACA ACAAATAATA GCTAGAAAGA TGAAAGCTAA AAATCTATT
 TGAATATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTCATGAAAC AATCATTTAA ATGCTTTTNC CAGGGGAAT
 GCAGAAGTTG AGACCCCTCA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA
 ATTCTCACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGTTATAACT GGCACITTA TTTGTTTTTG GAAGTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAAATTT AGAAGGGGAA
 TAAGAATTTT CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAGCCT TGCTTTCTC TTTTLAGAAT TTATTNCGA
 TTTINAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA
 ATTACTTATG TTTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTTGCTTTCT AAGGCCAGTC AGCGAATGTG
 GGGATGAGGC AGGATGTTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

SEQ ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GGCAGACAG CAAGACTCCG TCTCAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA
 ACATTTATTT AAACATAAGA AGCAGAAGGT TCCTCCTCTT GCAAGTATGT TTTCTCTAAA TGTAGCATTT CCACTGGAGG
 AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTNCA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA
 CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT
 ACTCCAGTCT CAGGCCCCCTG TTTTLAGCGG GAAGTCACAA GGAGG

309

SEQ ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCTGC NCTGTCTGTN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT
 CCAGCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCTGGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA
 GGGGAAAGGG AACCGCCCAT ATGINCTTCA CGTGCTGCAA GGGGGCTGTN TGGTTCCCAT GAAATGGTCA GCAGAGACTT
 TGGGATGGGT ATGACTCGTG GGTACAGGG TGTACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA
 GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEQ ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGTTAAG TATTGAACAG ATATTTAAAA GCTATAAGCT TTTAAACAGA ATAGGCATAT TGCTGATACC
 AGTATTTGAC AACCGCCTTG TTTTTCAGA TAAGAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA
 CTTCGTGGTA GTCAGGTGG AGGTACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTCACTAAA
 CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAACCTGA ATCTAAACAA AACCTATGTT GAACTTTAAG
 TCTGTAATCT AAGAACTATC AACTTAAAC TTGTTACAAA AGNGGTGAT GAGCACAACC ACTTCTTTTT GG

SEQ ID NO:1243: (Length of Sequence = 377 Nucleotides)

GTGGGGCAGG CGTGAGGTAG GGGTGGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGGNTCC
 CTGGAAAGGC ACAGGGCACA GACGGATGCC GCCTTTNITG CTGGGACACT CCTGCCACCA TCCACAGCTC CCCCGTCACT
 CCACGTTCTT GACTTGGTG AACAGGTGT AAAGAACCT CAGGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA
 CGAGCCTTGG GTTNTINAG GCCTCGTCC AGCATCAGCT CAAAGGOGAA GGACACATTN TGGACCTTCT GATCGAAGCT
 TTCGGAGTC AGGTAGAAGT GTGGAGAGG AACAAAGTAG TCTTCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTTTNCAT CAATGTTTAT CAAGGATATT GGTCTAAAAT NCTCTTTTTC AGTTGGGTCT CTGCCAGGCT TTGGTATCAG
 GATGATGCTG GCCTCATAAA ATGAGTTAGG GAGGATCCC TCTTTNCTA TTGATTGGAA TAGTTTCAGA AGGAATGGTA
 CCAGCTCCTC CTGTACCTC TGGTAGAATT CGGCTGTGAA TCCATCTGGT CCTGGACTTT TTTTCTGTTG GTAAGCTATT
 GATTATTGCC TCAATTTTCA AGCCTGTGT AGGTCTATTC AGAGATTCAA CTCTTCTCTG TTTTAGTCTT GG

SEQ ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGGCCAGTG CGGCAACCAG ATCGGGGCA AGTTCTGGGA AGTCATCAGT GATGAGCATG
 GCATCGACCC CAGCGGCAAC TACGTGGGCG ACTCGGACTT GCAGCTGGAG CGGATCAGCG TCTACTACAA CGAGGCTCTT
 TCTCACAAGT ACGTGCCTCG AGCCATTCTG GTGGACCTGG AACCCGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG
 ACATCTCTTC AGGCCTGACA ATTTTCATCT TGGTCAGAGT NGGGCGGCA ACAACTGGGC CAAGGGTTCAC TACACGGAGG

SEQ ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTTT TTTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAAATAT AAACACAAAC CAGTAAAAAA
 CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC
 GAGGCCATAA ATACTGCAGG AGGGGGGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTGGGCAGCG AGATGGCTCC
 GGGGGTTTAG AACTGCTGG CTTCGGCCCC GGCCG

SEQ ID NO:1247: (Length of Sequence = 384 Nucleotides)

310

GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAAGCTTTTG GACCTGCAGC CTTTGCCCGT NTCTGCTCTG AGAAACAGTG
 CCTTTNAGAG TCTTTACCAA GATAAATTTT CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAST
 GACGACAACG TGTTTGTGGG GGCCCCCAG GGCAGCGGGA AGACTATTG TGCAAGTTT GCCATCCTGC GAATGCTNGC
 TGCAGAGCTC GGAGGNGGC TGTGTGTACA TCACCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA
 GAAGTTNCAG GACAGNTCA ACAAGAAGT GGTACTNCTG GACAGNGAG ACCAGCACAG ACCT

SEQ ID NO:1248: (Length of Sequence = 225 Nucleotides)

AATTGGAGA AGATAGAAGT TTGAAGTGA AACTGGAAG ACAGAAGCAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA
 GGGAAATTAG AAGATAAAAA CACTTTTA GAAGAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAA
 GACAAGCTAG GAAACAAAA GCTAAGGGCA AAATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

SEQ ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCTATAGT CCATACATAT CTATAATGA CAGAAATATG AGAATGAATA AGCAAAGATA CTTATGTACA CCAATAATAA
 AGTAAGAAAG GTAAAAAAT TCATGTAATA AGAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA
 ATTGGAATAA CTCACCTATA TAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTTCC
 CAGAAGANTG TTTATCTCCA CAGCATCAA CCTAGTGTC TGCACACAGT TGGGACTCAG CCACTGTTGC CTGATTGATT
 ATGAAGNCAG TCACTGTGAT CAACCAACA GTAATTGAAC GTTCATTTT AATANGGTCA GTGTTAAATC TGT

SEQ ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGTATGTATC TTATATTAC ACTGCACACC TTGCAGCATC CTTACCTTGC AGAGTACTGA GTCTGGCTT CATGAATTIN
 ATGTCAAGTA AATGGGTTT AGTCATCCCT AGTTCATGTG CATGTNCCGA GAAAAGGGG AGCTTCTAAA ACATGTGCGC
 AAACCACAGG AACAGTGCA ATCCTGTGTG TCTCCTATT CACTTACTCC TCAAGGCCCC AAGGTAGGAC GCATGTTTGG
 TGGCTTTCTG GCTTACAAGT TCCAGTGCT ACTCCCATC CCTCAGAGT TTGCTGTGAT CACTGAGGGG AAGCAGAATG
 GAGCATCGTG TGCTCTTAC TGGAGGACTC CTGCAGCAC CTGAAACAAC CCAATGTTGT TAGAGGCAAA T

SEQ ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GCCTTCTGCG AAAGGAAGGC ACTGCCTCTN CACACCTTGT GAAACCTTTC CAGGACCTCC
 CAGTCAGAGG CGTCTGGTT CTCACGTCT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG
 TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTTNTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC
 AGAGGCTCAT ACAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTAGGN TTCTTGAAGA CAGGCACCAN GTTTTGTCT

SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAACA AAACCAGTTA TGCAAAAACA AGAGTACAAA ATGCCCTTCT CTGAAGCTCA GTTTGAGAAA CTGATTTCGN
 ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTTGATGANC
 TGAAATCATC TTGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTACAG AGATAAACA
 GTGCCCTCGA AACATAATTC ACCCATGTAT ATATAATANT TTINGAACAT ACTTTTAA CATAAAATCA CAGTCAAGGC
 AGTGATAGCA TTGCATCTC AGTGATTAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

311

TTGCTTTCAA GACAACACTC AGTTGCTAAA CCCATTTCCT TTTCTTTAGG ATATTTTCAT TGTCICCGAA TTTTAGAGCT
 GAAAAGTGCC TTAGAGATCA TCTAGTTCAA CCTCTCCGTT CAAATGGAGA ACCTGAGCCA CTAAGNTTCA CAGGNGAGTA
 AGATAATTGA GCAAACAAC CCAAGTAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAATT TACTATGTTG
 TTAGCATCCT AAGTATGAGT TTAGAAAAGG TAGAAGTTAT AAGAAAAGTT AAATGTGTTT AATATGAATG GGATTCCACT
 GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCITTA GGTATTATAG TTAAACGAAT ATTGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAGCAAG GAGATGAGTT GAAAGACAGT TTTNCTTTAA GTTCATCAGTA TGGGATGTCA GCAGAACAAA AATTAAAAAG
 ATTAATTTNC CTTTGTATCT AAAACTTCCT TAGTTTGAGC AGTAGGTGCT ACAAATTAT TTACATATCT TAGTATCATA
 GTTAAATGTA ATGTGTTTAG GAGAGGAAAA CAAAGATAC ATTTNCTTTA AATTCATTAA GAAATTTTCA AATTCACITT
 GTAGCCCATG CTGNATAGAA TTGGGCTGTG TTGGTACATT TGAAACACTG TTTATGTTGC TTGAAACACT TATTINTTTA
 ATCGCCGATG TGATGATGCC TATGGCCGAG ATCANATATA GCTAGATTGG CTAGGCT

SEQ ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGTTA GCTTTCTCTG GCCTAGAAAA AGAATAGGNT CATCAAGTCA TAAAACGAAG TATGINATTT CAGCACCTCC
 ACAAATGGC TTCATCAAAG AAGAGAATCC CATCATGT TACCTCTCCT CTCTAGGTTT TCAGCTGGG GCTTTGCCTG
 CCCCTCTACC TATGGCAGAA CCCACTGACT CGTGGNCTTT CCAGCACTTC CACTTGCTC CATTAGACAC TTAACCCGCG
 TGNCCGCTGC CTCATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTTCCTGA GACACCTTCA TGTGACAGGT GTCCCACTTT
 ATGCCTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAGTTCAAG
 ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTTCTA TATGACTATC CATTCTTTAT CAAAACATAA CATAGAAATA
 TACGATTATC TCAATTCTG TCTTTGNITC TGAAGGCTCC TGTGTCACAT AAAACTTACA TTAAATAAAT TTGTATGTCT
 CTCTTG

SEQ ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTTNAGA GGAATCTCA CACAGTCACC CAGGCTGGAG TNCAGTGGCG TNATCTTGGT TCACTGCAAC CCTGCTTNC
 NGGTTTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC
 CTGTTTINAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCGG

SEQ ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGGTTTC TTTCCCTACC CTTTGTGAAA ACCAATCAAT TACTAGATGA GTGGATGGAT GCAGAAAAAT CTGGGCTGAG
 CCAAAGTCCC TTTTGGAAAT ACAAGCCATA ACAITOGAAG GACATCAGCG ACCTTGGCTT GTTTAGGTGA TTTTNCITCC
 AGCTGCAGST AGTCTTGACA AGGAGCGTTT AANCAGAAGG CTCAGATGC ATTCTTGTG TAGGTGGGNG AGAGCACTTC
 TAATGTTAAG TGGGGTACAG NTCAGCTGCC CCCCCAGTA GCCTGGACAT CGTCTINTCC CCATAATCCT TNNCATCCCT
 ACAAGGTCC

SEQ ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGTCATATGT TACATGCATG TTTGINCAAT ATGTGTATGT CAGGNCCATC TTCACAAAT TNCATAGCCC CTTCTGTGAT
 CTGTTAAATA GGTATATTTA GCCAACCTC TCAGCATAAA GTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCTGCATC

312

TGCTCTTGGC TGGGAGCTCG CTTCCAGCC TGTAGGATGG CCACCTTGAA GGCTGTAACC CTTTGAAGA AATAAAGTCT
CCTTTTCTAA ATTTATAGAT TGTATGATTG TTTTAAGCTA ACAATAGCAA TGGCATTATC ACCTCACTTT CTGTGTGTGT
GCTTAGCATA GTACCTGACA CATGGCACTT GAGTTGGTAG CTATTTTTTA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTATAGCG TTCCCTTGAT
TGCNCTATGA AACTGAGTAA AGTTTCATTT CCTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTC TGTATATCT CACCAACAAT CCTGGTTTCT
ACAGTACATC AATTTTAAGT AATGTGCCAA ATCATGGCAG CAAAATATG TTCCCTCTAG CTGTTAGGGA CTTTGACTTG
NAAAACAGGN GTTCAAATC ATCTTCTTCA TTT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAAACAGA CAGCTAAGAT TATAGGAATA TTTTAAATAA ACAGCATTTA TTTTAGACAC ATTTCAAATA GAAGCCACAA
TAATCAAATA GATATTATCT GAAAACGTTT CAAAATATT AACCTTTTAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT
TAACAAATTA TTCTGAATTA TTGTGTCAAC ATATAAGGTT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA
ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAACAATT TACG

SEQ ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACTAGA AGTGAAGGAA TGCCAATGCT TGCCAGCAAA GCACCAGAAA CTAGGGAGAA
ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CCTGCCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAC
TATGAGACAA TAAATNCCTG TTGTCTTAGA CCACCCAGTT TGTGGAATTT TTTTACAGCA GAACTAGGNA ACAAATACAG
TTTTTTTTTG CAGTAAAGAA GTTTTAAATC TGGGTTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGTTGAGGTT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCTTACCCC CAGCTTTAGT GGAATCTGT GAAACACCTG
GGAATGTGTT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CTGGGACCTT TCTTGTAGGT GGCTCTGAAC
CTAACTATTC CCCAAAGATT CCCAAGTGGT AGGAAGGAGG GGGTGCAGAG GGATATTAAT CATGGTCATT AAGTCTCAAA
ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTTGAACAA CTGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACTACAT CAAGCACCTG CGGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG
GAGCAGCTGC GTACCATCTT CGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCCC TGGAGCAGAG
GTCAACCGC GAGCGCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNTGG AGCATCAAGC CGACTTNCAG ATCTACTCGG
AGTACTGCAA TAACCACCCC AACGCTGCN TNGAGCTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CTT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTTTTTT TTGAGCCGAG AAAGTGTGTG ACCGGGGCCT
CAGGTGGTGG GCATTGGGGG CTCTCTTTC AGATGCCCAT TGGCATCACC GGTGCAGCCA TTGGTGCAG CCGGTACCG
TCTTTTNTG TTCAACATAG GGTAGGTGGC AGCCACGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTTNT
NTCCAGGAG CATNTGGTTC TTTGGCGGGA CCCACGCAGC CTTGAGGATT

SEQ ID NO:1266: (Length of Sequence = 322 Nucleotides)

313

CGGACAGATG TCACTCTCGC CCGAGAAGGG GGACACTGTG ATGGTGTCT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA
 TGCCACCATC CACGTAGCGC ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA
 TTGGCCTGGA TGAGCTCGTC CTTGGAGTIN AAGTGGGATA TAATGACATT NTCGCCGTCT GACACGCGGG TCAGGGAGAT
 GCCCAGGCGC CCACTGGCAT GCTCATGCT ATCAGCAGGC AGGACCTTNA GCAGGAACT CGGGATGATC TTTTACCAGG
 TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCTATGTA TTCTTGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCGCAACATC
 GATAGTAAGG GAGTCAGGT TTCTTCATCT TCCCTAGAGT TAGAACTCAC TTCTACAGCC ACTGTGTCTAG GGACCACTTT
 GAGCGCCCTT GGCACCTGCT GGCTGGAAT CAATTAGCT GTAATGGATC TGGCCAGCT TTTCTCTCT TGGGTCTCT
 GCACTCATAG TGGTTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATG TCCCTTTCTC CTCTCATTT

SEQ ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATTGA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGTT ATTCATAAGG
 AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGTGG TCTTCGGGGT GCACATGTGC AGCAGCTGTA CCTGCTTGCT
 TGTATGTTAC ATGTCTCATT AACATCTGAA ATCTCCACCC GGGAGTGTGT TTTINACTAT TATAATGAGC AAAGGTTCTAG
 TCTGAGGACA GGTAATAATCA AAAATGTGCA CCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA
 CTGGACTACA GTGTGAAT

SEQ ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTTGAGG GTCTGCAGCA TGTGTGTAAG GCCATTAGC ATATGTTAAG GCCATTAGA GCAGTAATTA
 TAAAGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACCTCAAA ATTATGAAAG TTTCAGGTCA TTATTTTGCT
 ACAATGANC TTAGCAGCTA AGNAAAATGT CTGCCTGCTT ATAAACTAAA TATGGTATAA TTATATATTN CTNTATGTA
 TTTCTAAAGC TACATTTTCA CCTAACTCT ACTACAAAGT AGTTTCGGGA AACAAAGTAA AAGCAGGGGN AATCCAACCT
 CAAATATAAT CAAATATAT

339

GATAAGTGAG ACTAATGGAA TCGTTCCCT CTAACCTCAT AAAAAGTTTA AGGATTATCT TTCTTGAGTT CTCGTATTT
 CTGTTTTAGA AGAAAAGAAC AAAATTTCTAG AAACAAGATT ATAGTGCTTT TNCATAAGTA TAAATACGTG GGCCCTATAC
 AAACCTGGCA ATTCAATAGT CTTAAAGCAG ACATCCAAGC TATTGTGGGT GTTTGGATGA CACCATTTTC ACAGTAGGAA
 ATCATTTTAT TCTGAGCGTG GGAATCGGCA TTGGTTAAG CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG
 AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

SEQ ID NO:1271: (Length of Sequence = 335 Nucleotides)

ATGCCCTCTGG CTGTGTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT
 ACTGATATTA ATCAGTTTATG TTGGATTAG ATGAACAATG TTTAATGCTT TAAGGTCAT TTTTGGCCCC AACAGGACTG
 TGCTATATTA AATGACACCG TGCCCAAAG CTCAAAATTT ACATAGAAAG TAAAGTACTT CTTGAATACT AAAACAGTTA
 AGCATAAAAG GTGTGAATT GGTCCCAAAG TGATATTAC TTAAACATTT AATCCTACGN NCTATCTTAG CTGTACCTTC
 TAAAAATGCT TAGGA

SEQ ID NO:1272: (Length of Sequence = 323 Nucleotides)

314

GTTTATAGATA TTTTAAGATA TTAACTGTC CCTGTGGCT TTAAAGGAAA AAATAAGTAT AAATNCTTGA ATATTAAGAN
 TTTTAAATCA GCTAAATTCA GGGCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA
 GTTTCAAATA TGCCAGTACG TAGGGTATTT NIGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACTNATC AATGGAAATT
 AAATCTATAG CACTTTAAGG CTGTGAGCC CAACANTAGG GGNTACTTTG GGGGCACATG ATCTTTCAA ACATAAATTA
 GGG

SEQ ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAGCCTGGG CAACAAAGCG AAACCCTGAC TCAAAZAAAA AAAAAAAAAA AAAGTCTCTT AATCACAACA GCAAAGCTCC
 AAAAGTTCAA GCATCACAGG TAGCTAGTGG CTACTATATA GGNCAGCACA GACACAGAAC GTTCCAACA TCACACACAG
 TTCTANEGGG TAGCAATGAC CTATACTGCT GACCATGCTG NCCAACATGT NTGCAGCAGT CCTCATCCC TCTGTNGTCC
 CCTGTTACAA GCTTAGANCC CCTCCNNAC GCTCCTCCCC CATAAACAGG GCAAGTNGGG CAGAAGGTGG AATCCTTTTC
 AGGGGGCAAA T

331

GCAATGGGAT CTGGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA
 CTCACCCTCT TTCAGCTTTG GGTCTTTTAT GTGTAAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC
 AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA
 TGTMTGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCTCTGCAC ATATCATGTT TCAGCCTAGT ACAAGGCAGC
 CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TTGCAGAAAT TTGGTTAATT GTGAAGCTGA AATATCCTGA CTCTACCTCA AAGTTAATGT TTTAGGTAAC
 TGAACAGGTA TTCTNCCCAT TACTAGTATT GAAGTCAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA
 GCCAAAAAGT ACACAAAATG GACGCCATAA ATNCTGAAAT AAAAGTGTAT GATGTGTTCT GAGTCACGT AGAAGTCATG
 CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGTGG GACATTGGTC CTCGGAGGCG TTGTTANGTG GTTCGGTCC

SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATTGGG CAGGACAAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG
 CTGGAGTGA GGTCTGGGGA AATATTGACT TCCAGGACCC AGGCTTGAG GTTTTCNTCT AGCATGATGT CAAAACCAAA
 GAGTTCATGG CAGCTATAGG GCGTGCAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT
 TGACAACAAC ATCCTTTATC TTCTCCAGA TGGGTGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC
 TTCA

SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGTAAGT NIGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG
 CTTTCTGGAA AGCAGTCACA GCGGAATTTG TGGCCATGCT TATTTTININ CTCTCAGCC TGGGATCCAC CATCAACTGG
 GGTGGAACAG AAAAGCCTTT ACCGGTCGAC ATGTTCTINA TCTCCCTTG CTTTGGACTC AGCATTGCAA CCATGGTGCA
 GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG
 CCAAGTCTGT CTCTACATC GCAGCCAGT GCCTGGGGC CATCATTTNG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)

315

GGACTTGTAC CCTGGGTGGT GAGAAGACCC TGATTGGTTT TATTAGTGCA TTCTGTAAAG TNACTGGGAT AATCATGTTT
 AGTTGAGCAT TTTATGTGAG TTTCTGAAAG CNCTTTAATC AACTCCATAG ACAAGATTAT AGTGTGTCAC AGCAATAGGC
 ATGGGCCATG TCTGCACTGG AGGTAAGTTG CAAGGTACAC CCACGGGTGA TTTATCACTC TTACAAAGAT GATAACTAAT
 GAAGACCGCA TCTAGAATGC TCTTACTGGA GATGGTTTAC AGAGCATTTT TAATCATCAT ACTTAGATTT ATATTAAATAT
 TTCTTTTCAA ACTAAATTAT TCCAACTGT GCCC

SEQ ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTTCAGT GCTTCTGTGT CCGAAAAGA TCTTTTGACG CATAGGGCCT AACTGTAATA CACTTAAAGG ATAAGTCTCC
 ACCCAAGGT GAACATGGGT CATGTGTTAC ACGCACATTA GTTCATTATC CATGTGTGAG GACCTCCITT GTGAACAGTC
 ACAGCTCCTC CTATAACCTG TTAAATATGT ATGTTTGATC AACCCATTCA ACTTAAATNC TTGCTTACC TCTCCTTCCC
 TCAAAGTGCC TGGCTATACT TCCCAGCCTG CGGGATGGCC ACCTTGCCAGG ATGSAACCCT TTGTAAGAAA TAAAGTCTCC
 TTCCAAATG TACACATTGT ATGACTT

SEQ ID NO:1280: (Length of Sequence = 344 Nucleotides)

ATCCITAGCA TGCCTGINTT ACTGAGACCA TAACTTTTTT TTTTTTCCTT CTGCCCTTAC CCAGTGTGTG TTAAGTCTTG
 CTGTTAAGC TCCCACACTT AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAAAACAG ATATGCAGGT
 GGTTGTTTGT AACCAGACAG GATTTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTNTGT ATGINTTTTA TGTTCATAGT
 TTTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTATTTTGAA AGAATGAGGC TCTGAAAT
 AAACATGCCC AGTAACTAT ATCT

SEQ ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAAAGTA ATAAATCAG TACAATCACT AACTTTCCTT TGTACATAAT ATTTTGCAGT
 ATAGATGAAT ATTACTAATC AGTTTGATT TNCACAGAGG GTGCTGCTCT TTAATGAAAA TGAAAATTAT AGCTAATGTT
 TTTCCCTCAA ACTCTGCTTT CIGTAACCAA TCAGTGTMTT AATGTTTGTG TGINCTTCAT AAAATTTTAA TACAATTGNN
 TATTCTGTTT CCAATGTTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA
 GTATTTTAA A

SEQ ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGTCAAA TGTAGTTTAC AAAGGGAAAG GACAAGTACC TTNTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC
 CCACGGGAGG GTCGGGGAGA CGACACTTTT TCCCTGGGAA AGGCAGCTCT AATCCCAGGA ATGGTTCTCN GCAGAGGCTG
 GGTGGCCAGG AGCACTGTCC TCTAGCCCCC TAACTCAGCC TCTGCTTCAN CTGGTTCCC ATTTCTTCCC TCTACCCCCC
 AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCAT

SEQ ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG TNCACCCAC ACAGCTCCCC CATACCCATA ATCTTTATTT ATTTNCTTCG TTTCTTCCTT
 ATACCTTGTT TCAGGCATTA AACCATAACC TGTTAATTTAT NCTATCCTTT TCAAAACAGG TGTGGACCAT GCACAGATGA
 CCTATGACGG GCAGCACTGG CACGCCACGG AAGCCTGCTT TNNITGTGCC CAGTGTAAAG CCTCTTTNTT GGGATGTCCC
 TTCCTTCCCA AACAGGGTCA GATTTACTGC TCAAAAACGT GCAGTCTTTG GGTGAAGACG TCCATGGCCT CTGAATCTT
 CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

316

TTTTTTCACA AGGTGAAAGA CCTTTATGGA CATGACAGAG AGGACCTGAG TTAAGAGGGA AAATACATCT NCATAGCTAG
 GTTCACATTC AGTTATGTTA GTCCCAAACC TACAAATTCA ACATGATCCC TATTAAAATC CTACCAATAT AGTTCAAAAG
 CTTGACAAGT TGATTGTINAC ATTTATATGA GAGANTAATT AAAAAAAAAA AAAATAGGSC CAGGTGCAGT GGCTCACGCC
 TGTATCCCA GCACTTTAGG AGGCCAAGGC GGACAGATCA CTT

SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCTNATG ATGTAGAGGC CAAAATGGTA TTTNATAAAG AGGAAATTAC TTCTGANCCA CCCAGCTGG AAACACTGGT
 AGTATCGGCA GCAGATGTGA TTACATCCGT TTTGGTATTA CACATCGTAT TTACAGCAGA CATGACTGAN CTGGGAACAC
 TGCCCTGTGA GACAGCCTGA AAGTTTTTIN CAGATTTTNT GTGAACACTG TCTGAATTCA CATTGGCAA AATGATTCTN
 CCAGTTTCTC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT
 AGAAGCTAAC TGCATTGCTG G

SEQ ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTG TACAAAGTGT GCATGTNAGC GTGCGTGTGT GTNTTGCAAT TTTCCCCCTT TAGGTGGTTC AAATTGGA
 TTTGTGAAGG CAGAGCTGAT AATTAGAGAC AATAAAAATC TGCAGAGTAG ATGGTTCCAC AAACAAGACT ATGAAAGAGG
 GGATAAAGA AGAGGTCAAG AAAGACTCAA GAACAGTATA TAGAAATAAT TCAATTACAT TATGTGTATT TTAAGAAAA
 CATGTTCAA CTGCATGAGA CAGAAATAG CACTCNGTTA TCCTCCTAGA CTTCTNAAAG TTTTGAGTTT GTCTGCAATC
 TTTTCCATT AATCGNCTTT TGCCATCTTC AGAA

SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTCACC CGGTGGCCTA TAGCCCCCA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT
 GATGCCTAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC
 AGAGGAGTAC CATGGGGGGC CAGATGCAAG GTTTGGTGGT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGT
 AGTGACTCGC AAAATGTGGT CCAGCCGCTT TCCAGCAAC CCATCTGGT CCCTGTGAGC CAGTNTGTGC AAGGAGGCCT
 NCCAGCAGCG GGGGTACCA GTTACTATA GCAT

SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACTAAT TGGTATAGAT TGAGNTCAT GCATCANCA GCACTTTTGA AATTNTCCCC AAGTGATTCT NACCTGCAGC
 CTGGGTAAAG AGTCGCAGGG CTCCTGGATA GTCATTAAGT GAACTGTGGT AAGCACTGAT GTAGCAGGAT TACCTGCCCT
 ACTAGGTGCC GGAACATGCAT TTNCTTGCTC ACAAGTAATT TTTTAAATG TATGCTCGCA TCCCTGCCTT G

SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GSACACTGTG AGGGGAAAGG ACAATTTTAA AATTCCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC
 ATTCACTGTC TATTTAANCT TAATATCTTG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCAGTATTC
 TACACTTAAA GACTACTACT ATTTTINATAA AAGGTAATCT ATTCAAATTT CTTACAGAT TTCCCTTGCT GGGGATCAGT
 TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG
 TGCCACAGG

SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTTCATGGG TAAATTGCAT GTTCTGTTGG CTAATGTGGT TTCTTTTACA GAAAAAGTA
 TCAGAAATAA TCGTTAACT TTNCTACAT GGTCTTAACT CTTCTTCAGG AAATATCTAA CTTGTAAGTG CAATCCTTCT

317

TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC
TCINCTGIAT CTTTAGCCTT TCCAGGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEQ ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAACTTTGG GAGGCCGAGG TGGGCGGTTC ACCTGAGGTC AGGAGTTGAG ACCAGTCTGG CCAACATGAT
GGAACCCCAT CTNTACAAA ATAAAAGCA AGATATGCAA AATAATGTGC CAGTNIGGTG CCGTATACCT TTAGTCCCAG
TTACTAAGGA AGCAGGGTGT CTNAAACAGA AGAATCACCT GAGCCCAGGG AGGTGAGGC TGGCTAAAA TAGATCTGGG
GGTAGTGGTT AATNGGGCCT TGTGAATNAT TCAGCATAAG GAACTGTCCA ATATTTTTTT AAGCTGTCAG AAAATCC

SEQ ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAAGACAG AAGAGAATAT TAGCACTCTG TTGCAAAGGA GAATAGGTAT
GCTCAACTGG TAAGTAGAAT GCAAATATTC CAATATCTGA AAAAAATCCC AAATCCAAA TACTTCTGGT TCCATGCATT
TTTNTAAGG GATACTCAAC AGGTATTTTA AAAGATCAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA
AACGAGGATT AAGGNAACA TGTTGGAGGA CTTTTTAAAA ATGTGTTAAA GGG

SEQ ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCCAGAAAC ATTACGGTTT GATATCAAGT TCCTATTTTA AGAGTCACCC ATTTGCCAC CATAAGTNC TGGAGAAGGT
AGGGIATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGT GGTTCACACA TTCAGGTTTC TCTGATTTT ACAAGCTTTT
TCCCATAAAG ACTGCATTN CTTTAAAGC TTCTCCTGCA AANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAGT
AACATACAGA CGTTTCATT GGGAGGGGSC CNGAATGNG AGACAAATAA GTCCCTAGTA AATGGCATT

SEQ ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGGCA TCAGGAAAGG TAAGSGCCGG GAAACCGGGC CCTTGGAGAA CCGTGCCAG GGGAGGCCA
GCCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGG CAGGAGAGGC CCAAGAGCT AGGTCAAGCA GCTGGCTCCC
CTGGGGTTAA ATACATGGGT TTTTGTTTAA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTITT
CCTGCATCTT TACTTTTACA TTTGINCTTA GGTTCCTAA AACATTINAA ATACAATAA ATGAGTGTAG CAAAAATTAT
TGAAGCT

327

CAACCTCTGC CTCCGAGTT CAAGCGATT TCCTGCCTCC CGAGTAGGTG GGATTACAGG CATGATCCAT CACGCCAAC
TAATTTTTTA TTTTITAGTAG AGATGGGGT TCTCCGTGTT GGTGAGGCTG GTCTGAGCT CTGACCTCA GGTGATTAC
CCACCTCGGC CTCCCAAAGT NTTGGGATTA CAGGTGTGAG CCACGCGCC AGGCTACTGG TCTCAATTCT TTTGGATACC
CAGAAGCAGA AATGCTGGGA TCACATGGTA GTCTC

SEQ ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGGAGAG AGAGTATTTG AGCTGGGCTT GATTCCATCG GGTAGTATCT
GGAAAAAAA AAAAAATCC CAGATGAAAG AATGTACAA GACATGAGCA TGCAGGGCAC ACTTTGGAAA ATGGGNGAAG
TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTTGATTACA NGGCCAAAAC TTTTGGATT
TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

318

GACTTCCTTAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCCAG TAAACCCATC AGACTTCGTG
 AGACTTATTC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA
 AACATGTGGG AATTATGGGA GATACAATTC AAGTTAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG
 GCCCCT

SEQ ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAGAGCA AAACCTCCATA TCAAAAAAAA AAAAAAAAAA GAATTGCTGA CCTTTATGTG
 TTTCTGTTTA AGTTCACAAC AGTCATAATT CTGTAAAATA CAAGGCAAAA CTGTAGTTTC TGATACTAGT AATATATCTA
 ANTCAGTAAG TAAAAAGGAT GTGTAAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTC AATCAAAAG
 NCACGTTTCA GTATATATTA TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCINATTGT TGTTAGTTT ATGGCAGTGG TCTCCAGACT TTTTGGCACT AGGGACCACT TTAATGGGAG ATAATTTTCC
 CATGGACGAG GGGATGGGGA GGAGGCAGGG GTGGTTTCTG GATGAAACTN TTCCACCTCA GAAGATCATC AGGCATTAGT
 TTCTCATAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GTTCACAATG GCACTCGTCG CATATNCCGT CGACAACCCCT
 TTTTGTAGGT TCCATGCTTC CCATTGGCT TT

SEQ ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACTGCAC TCCAGCCTGG GTGACAAGAG TAAACTCCA TCTTAAAAA AATGTGTAAA ATGAAGATTA TCATACTACC
 TACATCATAG AATTGTTTTT AGTGTAAAAT GTGTGTGTGT ACATTTATGT AATAGTTAAC ATTTAAAGAG CACCTACTTT
 GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT
 CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEQ ID NO:1301: (Length of Sequence = 304 Nucleotides)

GGTTGCGGGT TATGTAAATC CCAACTTAT GAACAGGAAA TGTGTACAGT GCATGATAGG TTAAATTTTN CTTTATTGTT
 GTCCAACGCA GGTCTTTTGG AGAGAAAAA AGATCACAAT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT
 TGAAAGATAA TAGGATTAGG GAGGTGTTA TTTTATGGCA TCTTCTCTCA TGGAGTTCTT AGCACTTCGG ACAATTTGTC
 TTTTCCCCAC TTTGTACAGC TGTTATGTGT CATTCAACAG CCGGCTGTAT TTAACCTGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTTTATTGC CATAAGAAA ACAATTTATA AAATAATATG GTAGACTTCT ACTTCAACAT ATTCAAGTAA AAACATCACA
 GTGCAAGAAA GTGATCACA TTAAGCATGA AGACATCAA AGCCAGCCAG TATTTTAACT ACAGAGCAGA ATATTCTTGC
 TGTCCTTCC TAGAAAATGT TGGCATTTC ATTAACGTCT CAGGTACAA AAATCACTTC GTGTCCACTT CCGTCTCTTC
 AATATATTIN CATACTACA CTGTGTACA TTAATGCTGG TGGACAAAT AGCTCTTATA AAATCTAAA ACCTTTTCAG
 GTGGGCACAA TGGTT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TGGAGCTGTA TATGGTCCGG AGTTATATGC AGCATCCAGC TTTCAAGCAG ATGTNTCCCT AGGCAATGAT GCAGCAGTGC
 CCTATCAGG AAGAGGGGGT ATCAACACTT ACATTCCTTT AATCATTCTT GGCTTCCCTT ACCCTACTGC AGCCACCAGG
 GCAGCCGCTT TCAGAGGAGC CCATTINAGG GGCAGAGGSC GGACAGTATA TGGTGCACTC CGAGCGGTAC CTCCAACAGC
 CATCCCCGCC TATCCAGGTG TGGTTTACCA GGGACGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

319

SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTITNC TTCTCTCTC CCTACATATA TTCTAAACCT TCFAAGTTT TTTNATTTTT TTAAGGATCA CTTTATCATA
 AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGTCTTTTT TTTTCATATT AGCCCAGGTN CTTTGCTACA
 TTTATATGGT AATAAACGCC TTTATTAAAA TAGANTATTA AATTATAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTC AGGGAAAAA ATTTATAGTA CGTTTTCAAC TTTTTTTTTT TTTCTTTGAA ATGGAGTATG GTCATAAAAA
 GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAAA TTGCCACTTA CTTTGAATIG TTTTACCAA AGGTATCACT
 TTGAATAAAG ATAACITTTCA TTAGACATCT ATCTTTATGT GTTCTGCCA TCATTTTCAGT GAGATCAGAG GAAAGTTAAA
 TTAGGAACAA TGAAAAGCT TAAGAAATGA ACAATCATCA TGCTTTTGIG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGGATTTTT GAAGGCTTCG CTGTGGATGG CCGAGAACCT GCTCGGGGTG TAGGTCTGTG TGTCTGGGGG ACAGTTTCCA
 CATCTGAGCA CACGGACTGG ATTTCTGAAA TGTCAAAGTC TGATGCATCA CTGCCTCGGC GGCTGCTGGC CTTNCTGCCA
 GCTTGTCTTC CAGCTCGACT TCCTGGTCCG CTGGGAGTCT TCTTGGAAATC AGCAAATGT GTTGGGACTC TGGCAGNTGC
 AGTGTATATC AAGCCACTGT CCTCCCCANA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGTAGT GAAGAAAAAG TTATAACAAG TATACATTAC ATTTAACACA CCTAGCACAT AGGACACCCCT
 CAACAAACAG CTACAGCTGC TGTAATCAT GTGTATATAA TATAACATGC AAGCATATCT TCATGTATTG ATTAATTACT
 ACTTCTTGA AAAGGATCTG AGGAACATAT TTAATATATT TNATATGCCT GTCATATGT NCATTTAGTG CTTATCAATT
 ATATTTAGTG CTTTCTIATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

CGCCGGCCAA CGTGGTCTTC CTCTACATGC TCTGCAGGGA TGTTATCTCC TCCGAGGTGG GCTCGGNTCA CGAGCTCCAG
 GCGTCTCTGC TGACATGCCT GTACCTNTCC TACTCTTACA TGGGCAACGA GATCTCCTAC CCGCTCAAGC CCTTCTCTGT
 GGAGAGCTGC AAGGAGGCCT TTTNGGACCN TTGCCTCTCT GTCATCAACC TCATGAGCTC AAAGATGCTG CAGATAAATG
 CCGACCCACA CTACTTCACA CAGGTCTTCT CCGACCTGAA GAACG

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TTTCCAATTA TTATTTTGCC AATATCCTCA ACTCTTTTGC CCACITINAT CTTCATTCA ACCCTCCCTG CAAAATCCTG
 ATCTAAAAGC AACCCAAGTA TTTGCCCTCT CAACCTCCCA GCTGCTGAGT GGTMTTGGGA ATTACACAAC CACTAAGCTT
 GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCAGTGC TGCCCACTTT CTCTTCCAT ATTTCTCCAC AGCAGCTGGT
 CAAAATACAT TTNTCCCCAA ATGTCTTACA CAACCCCTT CTCTCTATC ATCTTANCT CACCCCCACC CCAGTTCTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGTTTIG CTCTTGTGCG CCAGTCTGGA GGGCAATGTG CGATTTCAGC TCACTGCAAC CTCTGCCTCC CGGGTTCCAG
 CGATTCTCCT GCCTCAGTAT CCAAGTAGC TGGGATAATA GGCACTTGCA ACCATGCCCA GCTAATTTTT GTAGTTTTAG
 CAGAGACGGG GTTTCACCGT GTTGGTCAGG CTGGTCTTGA ATTCTGACC TCGTGATCTG CCGGCCTCGG CCTCCCCAAA
 TGCTGGGATC ACAGGCATGA GCCACCGCAC CTGGCCCTAT ATCTGCTTC CTATCTCGTG GGTATGGTG TATGGCTTTT
 ATTTATTTCA ACCTGCAGTT GTTGCAGAA CATCTG

320

SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGCTTGA GCCAAACAAG TGAATGTATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCTTACT
 CACTTCAGCT GGGGTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCASTG TTAGCATTGT
 CATCTGAGAT CACTGCTATT AATATCATC ATTAAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA
 AATCTGTAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGTGTTTTTC
 TAATTTGGAC C

SEQ ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTTCCTT TATAAATTAC CCAGCTTCAG ATTTTTTNAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA
 GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACTT CTAGTATTTC ACTACATGGT TGTGTTGCCA AAATGAAGGC
 AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTGAGGTGA AAGAGCTGGG GTTTAAATTT GTNCTTTACC
 AATTATTGAG ATAAGTGTCC TTGAGCAAGT TACTTGCTTT CNCTGATCTT TAGTTTTCTT ATTTGTGAAA TTGGAAATGG
 TGGTGTTTCA GAGGGGGGTT GTATATA

SEQ ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TGGAGCTGCA GCTGGCCCCC ATTAGGTAGT TTCTTGGTGA ACGTTTTCCA
 AGGAAACTTT TTTTITAACA ACTTCATAAA GCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT
 TTGCTTCGA CGACTAAAC GTTAAATGGG GGCTTACTTT GTGCATTAT GGAAGAAAAC TTGGAAGGCA TTAAGGCTA
 CATTTTGAGC CTGCGATGAT TTCATTCAAT TATGCATGAA TTCATTGTT CAACATTTAT TTAGTACCCA CTATATGCCA
 GGCATGTGC CAAATG

SEQ ID NO:1314: (Length of Sequence = 391 Nucleotides)

CGGTTTAGA CCTCAGTCGG CGCTGTGAGG GCACTGTCCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA
 GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTACGCCA GGTAGAGCGG TTAGAGTGGC AGCCGCTGGA
 GAAAGGGTGA TAGAAACACA TCCTGACTC TTGGTTATG TCCACGTCC TCTGTCTCTC CTTCCCTTC CTTACTCTCC
 TTCTTTCTG CCTCTGTG TCCTTTGAA GTCCCTGTTG TCAGTGCATT TNAGTGCATT GACGTGTCCT AAACACTGAT
 CTNCACACAC CTCTTTAT CTCCACCTG ATAGGCAGGC CCCAGANCC CTTTTTCCT AGCTTTGTT C

SEQ ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCTCT GAACACTGGT GTTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT
 TAAAAAGTAC TAGCCGTTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCATTTCCTT TCCCCCTTCT AAGGATAAGG
 GAGAATAAAA TAATCACCAG GAGGCATGGA GTTTGAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC
 TGTGGENCAA CATAATGAAA TAAATAAAG ATGTGCCCTG GCCTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA
 GGGCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGG CAGGTGGAGG CCAG

SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTGTGTTACA GGTGTTGAAA GGTGTTGAG ATTAGTATTT ACTTTTAATT TTTTGAGTAA TAGAATGCGT TTAGGTTCTA
 AATTACTATG GAAATGGCAT AGTGAGGATT CTNCACAGAT ATTAGAGACC TTCAACAACA TAGTGAAAAT AGATTGTGCC
 TTTCTGTGAA ATAGCTGAAC TATGAAAATT TGANCTGTCA CTGGAGGGGG CATTTGCTCT GAAGTTTGCC AAAGTAAAAA
 TAACATTNCT CTTAGTAAG AAAAAGCTAT ATTTTNCAT ACTGCTGCC ACAGCAAACA AACAAAGTCT TGTGTTGTT
 TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

321

SEQ ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCGGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGTTAA
 CTATTATTAT NACAGCACAG CAATTTATTT AAGATTACTG AGTGTTCAAA TGAAAAAAAA GACATATTAA CTTATATAGT
 GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTTT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG
 TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GTGGGACTAC AGGTGCACGC TATCATACCC AACTAATTTT TGTATTTTGA GTAGACATGT GTTCCCCAT CTTGGCAGGG
 CTGGTCTGAA ACTCCTGACC TGAGGTGATC CACCTGCCIT GGCTCGCAA AGTGTCTGGA TTACAGGTGT GAGCCAACAA
 GCCTGGCCCA TTTATTTACT TTTTAAATTT CATTTTCTT CATCATGTAG AATGGACAAT TTCAGGAAAC TGATAGAAAA
 TACTGTCTAA CATCAAATTT TCAAAAAAGT TTCTCTGTAA CAGATAAGGC AGTCAATTC

SEQ ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG
 GGTCAAGTAG AGGGCTCCTG GGCCCACTGT AGCCCTGCTT GGTTCAGTGT AGCTGGAAGG CTACGGGNC TTAGTGGGGA
 GCCACAGCCT TTCCCACTAG GGGGCCCTCT ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC
 GCTGGCCCTA AAGGGAGGTG GTAAATAGTG AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEQ ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGTCTTGATC TCCTGACCTC GTGATCCACC CGCTGGGCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGTGCCCTG
 GCCGAGATAA TTATTTTINA GTGACGATTT AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA
 GAATATTGA ATGCTGGTTA ATATATTINT TTTAAACTGT GATAGAATTG AAATCTGTGA GCCACATTTT GAAAGTTTAT
 TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTCTACAAG AGAGAATTTT CAAAAGGTT AGTTGTGTTT ACATTAAGAA
 CTTGGGGTTT GNTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEQ ID NO:1321: (Length of Sequence = 366 Nucleotides)

GTITGGCTAA TCATCCTATG ATTTTCTTAT AGCTTGAAAA CTTTTTATAT CTTAAATTTT TTNATAATTT TGAAGTATT
 TTGTTTGGGC TTGTATATC CAGTGTATTT TCAATTAAAT TCCCCTAAT AAAGTAATTC AAAAGGAATA AAAGTGTAAT
 GTGGGCTGGG CGTGGCGGCT CATGCCGTGA ATCCAGCAC TTTGGGAGGC CCAGGCGGGC AGATCACCTG AGGGCAGGAG
 TTGGAGACCA GCCTGGCCAA CATGGTGAAA CCTGTCTCT ACTAAAANTA CAAAATTAGC CGGGTGTGGT GGCCATGCC
 TATAATCCCA GCTATTTGGG AGGCTGAGTC AGGGAGAATC TCTTGA

SEQ ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGGAGGGTA AAACAAATCC CCTCCAATG CTTGTAGAA GGGGATTAGA ATCACTGTGG AATTCGGTAT TGGCTAATAA
 AGTATAAACG CTAAAGATCA ATGCTGAGT GCACAGTTGT CCTTCAAGCC ATGTACTTTC TGCTTTCCAA GANTAGANGA
 CTACTTTTTA ACCAAGANTT AAAAATAANC TCATAATTTA AACACCTCTT TCATGCCAAA TGAAATCTT AGTGTGTAAT
 AATCAGGCTC ACCTGAATAC AAAGTGTGCC TGAAAATGCT GACAATCACA AAAAAGGTTT TAGAAGCTTT TTCAAAAAAC
 AAGTTCAGAT GGTTCCTACT GAGTTACTAT TTGAGGTATA AG

SEQ ID NO:1323: (Length of Sequence = 244 Nucleotides)

322

CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA
TAGGATTGTA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTTCAATG TTCTTAAGTG GGAAGTCACT TATTACAGAC
CTNATTGGGA GTAAACAAAG CTGTTAGACC TTTCATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA
GGCG

SEQ ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTNACCT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG
TAGGCAACAG CTCTGACTTC TATGACATCG TGGTCATCGC CACCCCCCTG CACCTGGACA ACAGCAGCAG CAACTTAACC
TTTGCAAGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTTCCAGCC CACCGTCGTC TCCTTGGTCC ACGGNTACCT
CAANTCGTCC TAATTCGGTT TCCCAGACCC TAAGCTTTT

SEQ ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGTTATTT GTGTGTGTGT GTGTGTGTGT GTGTGTGNCAT CTGCAACCC TGCACTTCAT TATCCAAAA TTATTTGATA
TTTTATAATC AGAGAAAATG CTATTTTAA ACCCTACCAC TGCTGACCAA ACAACAATCA CAACAGCATA AACTAAATA
CTGTTCAACA AATCTATTTT AGTGTAGTAA TTAATAATT CCTAAAATA TAGACATCCC TAATATTCTT TCNTTAGTG
GTTCTCAGA GTGCAATCTG TGGAGCAACT ACCTTGAAGA AATTGTGGGG AATGAGACCN TGGGAACCC AAATGTTTAG
NATGGTGCTC TNGGGGAC

SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTTTGGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCTT TGAGTCCAGA TCACAAATTA CCAAATGAAC
ACGTTCTCCA TTTTGTAGTAC TTTTGTACCT GTAACCTCTT GTCTACCTAA GATGAATATT TATTCAATGA ATGAATCAAT
TAATTTTGGT GCCCCAAAAT TCTCAGTGAA ACAATTTCTG GATACCTCTC CATCACTAAG ATAATCATA TGCACTGTC
ATATTCTTCA ACTTAGNACA AATCTAAAG CTCCATTTAT CCTTACTAGA AGTGTCTGTG TGCTTTTTTC ACTCTCAAAA
TATCTCCAT GCGCAACCA AACACTAANG GGNACCACCA TATCTTGCTC AATGGAGGCN AAATCACTTT TTA

SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCATTCTAT AATAATGGGT ACCATTCTGC TCTGTCCAC ATTTTATGA
AGTCTCTTTA AATTAAAAA GGCAATGTG TTTGTGGTTC TTGAGCAACT TAAATACGTT GCTCTGAATA GTTATTGTGA
TGAGGTAAIT TGTAACAACT TTTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCCTTTAT TATAAGTAT
ATTAGGCTGG ACTCTTGGCT GTAGTGCCA GAAAACCTCA CTCAGATTAG TTAAGAAACA AAAGGGTGT GGTGACAGTG
GTGGCTTTCA GACTATTGCT GCAGGCCAC CTGCCATCCT CTTACACCCT CAACATACCC T

SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAT TCTTAAGCAG AGTACTTAAG TACAAAATG AGTGACTGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA
AAAATACATG GTGTGTGINT TGGAGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAGCCAA CAGATATAGT
CTTCTGTTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCCT AATGTCTCCT TTTTGCTGGC
AACCTGGGG CCAATTACAC TAGAGGGTGT GTAGAAAAA GAGGAATAT

SEQ ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTTGGAT ATTNCTAAT TGCAATGGTT
ATATTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGCN CTTTATGAA AAGGCGACAA
TGGGGACCTC CAAAGCGCCA AAGTTTCTGC TAGGCATAGT GTTATTTTGA GATTACATTA AAATGGCTAT TTAGACCCAT

323

CTAGCTGAGA CTATTCCAAA ACAAACTTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN
TTTACTINCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEQ ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTTAA ACAAATGCA AAACGTGAACG TTACCTCAAA ATGAAACAGT GTGIGTACTG GCTGTTAGAA GTTGATGGCG
GTCTACTGTT TGATAITTCAC TGCCATCTTC CTCTGCCCCA CTCTACCTCA ACTCGGGACC GCTCACCTA ATGGTGGGCT
TTGCCGCTTT ATGCCNTGTA GAGNAGACAC TGGGTAACCA CAGCAAATCA ACACGGGNTC C

SEQ ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTTGAGAAGA ACCAAATGCT GGTGCCATCT TGGAAAGTCT ACATCACCTC CTCCTCTTAC
TTCCTTGAAC AGCAATATTT CTGGATTTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TTTTTTTCAG CAGCCAGTTT
CTTCTCAGAG AACTGGCCCCA AGAGTTTCTG GACAAATATA TTTTGATCTT TCAGAAATAT GTTCTNATTC ACTCCTACAT
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEQ ID NO:1332: (Length of Sequence = 290 Nucleotides)

GGACGAGGAG ATGTCTTTGG TGGACTTGGG AAAGAGGTTG CTAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA
CGTTGATGGC AAATGGCGCC CCATTCACCA CAGACTGGCT TGGAAACATCA CCCCTCCACC TTGCAGCTCA ATATGGTCAT
TATTCACAG CAGAAGTACT CCTTCGAGCA GGTGTTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGCACAT
GGCTGCAGCC GATGGACATG CGCACATCGT GGAACCTGCT TTTTCGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

CGCCAGCTA ATTTTTGTAT TTINAGTAGA GACGGGGTTT CATCAATTNA GTCAGGCTGG TCTCAGACTG CTGACCTCAT
GATCCACAG CCTTGGCCTC CCAAAGTACT GGGATTACAG GCATGAACCA CCACGCCCAT CTGATTTCCC GTTTTCTGCA
GGGTAAAGNC TCAGGGCCGG CCCATTGNTT TCAGGANITTT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATAACTTT TGTGTGAAT TTAGAAAATG TGGATCTTTT ATACTGTCTT TCCCTTTTCT TCTGCCATCT TTATCTTCTG
CTGAAGGAGA CAAACAATAT TTTAGGTGAC ATCTATCACT TTATGTAGGA CCTGCAACA CTCATGTTGT CTTCGGACAG
ACAAATGGAG AATGTAAATC TGTTACACTG TGACAGGATA TAATTNTGGA TTGCATAGN TINCAACAA GTGTCTGTGT
GATGANTAAA TGGTAAAATA TATTTAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GGNTCTTGTT AGAATGCAGA TTCTAATTAA AAATGTGTAG GACAGGGCCT GAGACTCGGT ATTTCTAACA AGTTCCCAAG
TGATACTAAT GCTACTGCTT CACAGATCAC ACTTTAAATA GTAAGGTTCT TGAGAGAGAT TAGTCTCAAG AGAAAAGAGA
CAAAAATCTC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCTTAGTGAG
ATTCTGCACA ATATTTTCATC ATACAAAAC GNTTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAAGC ACTCTTGTTT GGACTGGTCA AAGATGTTCC TAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANTTAGG
CTGGCTCCTC CCATGTTGAT ATCTGCTTCT GCATAGTTGG TGAAGAGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA
ACCTTTAGGA AACCCCGCTG GTACCTGGCC TGINTTTTGT AAGTATACAT CAGGCCAGGG GGCTGCTTGC CAAGCAACAT
CATTGACTGC ATACTGTTTA GTGCATGCAT TACCAGGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT

324

TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTTCTG GGTTTTTCCTA TCATTTCAC TCATTAGTNC CAGGAAAA

SEQ ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTTTCCTCAG TATCAGAGT ACCGTGTTTIN CTGGAATTIA TTAAAAATGT CACCTTGTAG TGTTCCTCT CTAGGGCTGT
TTGTTTCATT TCCCTCTGAA TGAATGCTGC CACACGGTCA TATGTGAGCC AAGTTTACAA GAATGGAGTT GCTGCTGAAG
AGATCTCTCA TTCATCTCCC CCAGTGCTG TCCTTCACAA TCATAACGTT ACCCTTGCTT GACAAATATA CTGTATGGCA
AGTCATAAAG GTCTINGAAC AGGACTTGAC CC

SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCTT TATATAATAT AATCAAGTTC CTCATCTGG GCATTGAGTT AAATTCTACA ACATTGCCAA AATCTGATT
GACTCTACAG AATATGTATA GTTATTTAA CCAGATAGTA ATTTAAATTT TTACAACATG CGTATTTTAT GTAATATTAA
TAACAGTAAT TTAAATTAAT ATTCAATACA TACCGTTTGA ATTTTATATA GG

SEQ ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGT TTATTGAGAA ATGGATAAGT AATACATAAT CACTCTTCAT CTCTTAATGC CCGTCTCTCT
CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGAAGTGA GGAGGACACA GGAAGTACCC ACCACCTTCT
CCTCCCGGTC TCCAAGATG ACTGCTTATA GAGTGGNGGA GGCAACAGG TCCCTCAAT GTACCAAGTG GTCACCTATA
GCACCAGCTC CAGATGGCCA CGTGGCTGCA GCTGTACTCA

SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTTCACC TCAGATCATC AGGCATTAGA TTCTATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTCATAGC
AGGATTGCA CTCCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGGAGCTGA TGGTGGGAAG GTGTATTTC
TCGC TCTC GCCTACTGCT CACCTCTGCT TGTGGGTTCC AGTTCACC ACAGACCACT GGTCTNTGAC TCAGGGACCA
CTAC TCT AACANGNTG AGGAALACAA CTGGGTTTAT CACACAATTA TTTTAAAGTT CAGGTTTINC AAATACTTA
TCC

SEQ ID NO:1341: (Length of Sequence = 376 Nucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTTGGCCAGA
GGAACCAGGG CCTCAGCAA GGAATGANTIA CAGCCTATAC TGGCTTATCC TCGCCCTAAG ACATTAAAC AGTTGTGGGG
GTTCTTTGGA ATCACTGGCT TTTGCCGACT ATGNTCCCC AGATACAGCG AGATACACTC TAAGGAGACC CAGAGGGCAA
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAAACTACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC
AAAACCTTTA AAGCAGSCCC TTCTTNCAAG CTCCAGCCTT TAAGCCTTNC CACAGG

SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCCCTCCCC ACTCCCTGGT CCCCAGGAGC AGCTCCTTCT GCCCGANTNA CTCACAGTGC AGGGAAAGGA GGCAGGGAAA
AGACCAGGAT TCTGTGAGTT CTGAGGTTGC CACACACAAA GAAGCTGTGG TTTCTCTGCC TCGGCCACTG ATGAGACTAA
AACTGGCTTC CCTTGGAGA CGGCAGATT CAGGCTGATC CCTGCTTAAG CCTCTCATC CCCACGCTGG TCCTGGTATT
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GGAATATCC
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

325

GAACCCAGGA GGCGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAAGAGCG AAATCCATC
 TTAAGAAAAA AAGAAGGCTG TGATAGTTAA ATTTATGCAT CAACTTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC
 ATTATTCTAG ATGTTTCTGT GGAGGTTATT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTGGG TGAAGGAGAT
 TACCTGCGAT AGTGTGGTGG GTCTCATTTA ATCAGCTGGA GGCTCAATA GGGAAAAAGA CTCACCCCTNC CCTGGAGCAA
 GAAGGAAATT CTTGCCCAGC AGAACTTCTT NGGCGAGCAG AATGCAACCA TAAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGGCTG TGCTCTGCAG GTCTCCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TCGTAGGACA
 CCTGCGAGCC AGAGCCGCTC GCGTCTGNN AGGCTGCGCT CCTGCGCTTC TTCTCGGGA GAGCAGGTGG CGTATCTNTN
 TGCTGCCCTG GGGCCAGAGG TCCGNTGGC TGGGATGGC CGCCAAGAGG CAGCTGGAAA GGAGGGCCAA GAAATGGAGA
 CCCAGACTCC CCCAAAGACT CTGGCAACGG GCTAAGGTT CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG
 TCTTNCCTGA GGAATTCATA GTGGGATCA TAGCAGATCT TGTCCCTTT CTATACCATC TGTCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

CCTCTCCCC CAAGGAGCTT GCAATTTTAG GAACTAATCC AGTTTGAGGG CTGAATTTAA GTTAAATCA ATTACTGCC
 TATGTACTCC TTTTAAACA ACATTAGGTC AAGACCCTT CAGTGCTAAA TAACTGATT TGTATTATC ATACATTCAA
 GTTTTATAA TGTGTTTTT CTCACCTTAC TGAAATATCA GAATCCAGCT CAAAAACAGA ATCAAAGAGG AGACTTTTAA
 GCTTATTCAA TAAAACTAT GGTACGTTAA TATTCAAAT AGTGGAATC ATTATATTAT CTAAAATTCT CAGGAACTG
 CTTTAACCAT GGATTAAATA ATTTACC

SEQ ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGTCAATA CCCATAATTA AGTCAAGTTG CCAGCCTTAA TTATATTNT NTCTGCTCG TCACTCTCT CTCTCCTTC
 CTCCTCCCT CTCTGCCCCA CCCCCGTGTA CATTATATAC CAATTCATTG GAGATATATA TATGINTGNT TNGTNGTNG
 TGTGTGTTNC TGTGTGTGTG TGTGTGTTAA AGAAGCAGGA TGTCTTACAC AGATGTTTCA TATATTGAGG NATTACAGAG
 TAATTACAGG GAAAGGTATT AACTGTCTT TCAACACCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TTTTTTAAAC TTTTGTGCA CAGGACAGAA AACTGCCTGT ACATGCTATG TCCACTTTTG GAACACAGAT
 TTTTACAAT TATGAATGCA CAAATCTTA CATATCATGC AACTCTATGC CAAGAACCCA ACTTTCTTCC ATGCAACAGA
 TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTCCAGTA GCAAGTATAA TATATGTTGT TGAGGGAAAA
 CCAGTCTTAA CAATTNCTG TACACAATAT TCATGTGCCA AATACAATGN CAGGN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGTCCCTGCT ATGTGGATAT TTGGTAGCAA TGACTGATGT GGAACTACA TATGCAGATT TTATTGCTTC AGGAAGAACA
 GGTAGAAGAA ATGCAATACA TGATATCTG GTTCTCTCTG CAAGTGGCAA CAGCAATGAA TTAGCCTTGA AATTAGCAGG
 TCTTGATATC AACAAGACAG AAGGTGAAGA AGATGCACAA CGAANTTCTA CAGAACAAAG TGGNGGAAGC CCAGGGAGAA
 GCAGCAAAAT CTGAAAGCTT AACACCCAC TTTGACCTC GGCCACACCT GAAATGTCT CAAATCTCCA GGGNGTATCT
 GGAATGCAT TT

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

GCCCCAAAA CAATGACACA AAATTCATTT GGTAAATTCA TGTAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA
 AGTGGGAGTA TGATTAGGAG GGGTGAGATG AAACTATTT TACAGTAACA TTTCCACCAA AAGACTGTCC TAAGAACAGC

326

CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGTGGTATT TTTTGTATT TTTTAAAAGC TCCCTGGGTC CCAGGTGTTT
TGCACTTTTC AAGGNCITAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGTGCCCCA GGCTAGAATG CAATGNCGTG ATCTTGGCTC TACTGCAAC CTCCACCTCC CAGGTTCAAG TGATTCTCCT
GCCTCANTCT CCCTAGTAGC TGGGATTACA GGTGTTTACC ACCACGCCAG GCTAATTTTT GTATTTTTAG TAGAGAAGGG
GTTTCACCAT GTTGCCCAAC CTCGAACTCC CAACCTCAGG TGATCCACCT GCCTCAGCCT CCCAAAGTGC TGGGATTACA
GGCATGAGCC ACTGTGCTTG GGCCAATAAA CTATATTTTN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEQ ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGTG GGATGAGACT TCAGCTTTAT TGGAAATGTT TTATTTCTTT ATCTAAAAAA ATACTAGAAA GAAATACAAC
AAAATGTTAA CAGTTGTTAA TGTCGGCTC TGTAATATA GATATTGTGT TACTTTAGTC TTTTTTTTAA TCTCAACTAA
ATTAAAAAAG GAATTTTAGT CTTTTTTTAT CTCAACTAAA TTAAAAAAGG AATTTTAAAA CCCTAGTGTT ACATGCAAGT
GAGTCCAATA ATGGCAAAT AATAATGAGG NTACATAGGA AGGGTGACCT AAATTTTAAT GGGTGAATAC TGGGTCCCCG
GTACAAGTTT GANAATTTT GAATTTCCG

SEQ ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTATACT ATTTAAAAGA ATCCTTAAAT GATGGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATTG
ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA
AGTAAAAGTA AAAATTAAAA AAGATGGGTA TTCTATATTT ATCTTTCATG TTACATTTTT CTTGTGGGGG TTTCTAAATA
AACTTGTAAT CATGAATGTT TTATTTCTAT TCTGTATTTT AAAAGAAGC TGAGTAACAA AAGG

SEQ ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA
AAAATGCAAG AGAACAAAAA AATTTTTTGA GTAATATTCA TCTCTGCAGA TCTGAGTGAC AGTCCGCTTG AAACCCGCT
GTAAAAGTGG TAAAAAATGA TTTCATTGTG ATTATGTTAA AATTTTTGAT GTCTCTINTA CTTGTTTTAG GGGAACTCGG
TCTTCTGNC ATTTATACCT GGATANGTNC CTTTCCCTGT AATTTTINCT GAAAGGCTCC AATTTCC

SEQ ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGGG CCCAGCCCC
CAGGCACCTC TCTGTGTCAG TTTCCCTGGA GAAGTCATGA GTTGAAGAG TAGGCAGAGG CCAGGTGTCA TCACTGAGTC
ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGCTCTGA GCACAGGATG TTAGCAAGA CTCTGGGTT CAGCTCCAG
TCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTTNN TGCTCTGTT TCTACGGCTG CAAAATGGGC
ACAATAATGT CAGATTCATG AGGGATAATG AGGACTAAAA TTAGGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC
TTATAAA

SEQ ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATTT GCCTCTATAG GAGGTTTCAT TAGGCATCTN CTTCAATTATG AGTGCAATAT AATCAAACAC TTATCAGTAC
AAGGCAGAGA GACCGGGACT AGCTGCCTAC ACATCCTCAA TGAGCTTTAG GAAATGTGAA GGAAACATGG ACTGAAAATC
TTCTGGTGGC AGGTACTCTC ATGTGTGTC CTATCTGATG CTCTCAACAA CCTCTAGGGG TAGATATTGT GACCTCATC

327

TTGCAGAAGC CTGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC
ATGNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEQ ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTTTTTTAG TTATTTCACT CTCTCTGTTA AATTATCTG ATAGGATTCT GCAGAGAACA AAATTCAACA GGGCCCTGTG
GAGCAAGGAG CCCCTTTTCC CTATCTCCTT CCTCTAAGAG CTACACCCAG ACCAGCTGGT TATCAGCGGA GGCCCCGTG
CTCTCATGA GAACGCTGGT GGAAGACGAA GGTGATGGCA GTGGAGGCAG CATCCAGGC AGCCTGGAGT ACCTCATCCC
GGAGCCCCCA CTTATCAGTG CAGTGGTTCC ACCCTGCCAG GGTCTNAAGT GCAGTCAGAA CCATCAGGGG GTNGCCGGAT
CTGACGGCTG TTACACAAC GTCGGCAGTG CAAACCTAGG GACAGAAGGC ACANCTNAAG TCACTNCAGA TCCCATCTTC
CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TTTCACAAAG AATTATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT
AAAGTGATTA GAATTGAGA AACTTTTACT ACATTATGTG TTAATATCAT AAGAACACTC CTTGGGGGGC AATTGAATAA
TAAAAAGGNC TACATTCTTT GCACCANGTG NTCATTTTCA CCCACATTCC AGTATTTTNC TCTAAGTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TTGTAAGCCC CTGAGCGCA GGAAGTGGT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANCTT AAGTACAGAG AAAACCTAAG AATNCTTTTA
GATAGACAGA TAAGAGACCA CAGAGAAGA GCAGATTCTA AGGTATNTGT GAGAAACGTT ATGTAATGAA AAGATAATTG
ATGACACACA CTCCAGAGN GTGCTGGCGA GATTTGATTC AAAAGCACAC GGCTAGGGCA CT

SEQ ID NO:1359: (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAAATAT TAAAATTTT AGTACTAAGT
TAAGTCTGTA TCATTTTACT TTTTATAG TTTCTTATTT TATGTTGAT GAGATGAAA GCTTGCACAT AAAAGATGAT
AAGAAATTAG AATTCATCGT TTCTGTGTA CCAAGAAGAA CCTAGTGAT CTCTAAAAGA ATTGTTGTTA AAATATGGAT
TCINCTTTCC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEQ ID NO:1360: (Length of Sequence = 366 Nucleotides)

AAAATTTAAT TCAACTGACC CATCCACCG GGAAATGCCA CTAGGAAGGT GTAGCCTGCA GTTTTACCTA ATAAGCACAA
CTGGAGGGGA ATAGAAACAC AGAATTGTGA GGAATCGCA AGGCATGCTG CTCAGAGCAT GCCTAGCCCT GCACTGAAAG
CTATGAGATA CTGGTTCTGA GGCAATGGCTG TGCTTGCTGG TGGGAGCGGG CATCTCCCT TGGCCTCCCT GGGACACCTC
CTGTGCTCCC TGCACGAC TCCAGTGCC TGGGGTGTCT ACACAACCTG CTGCAGCTTC ACTAAAGAAC AGGTGGCACT
NCAGCTTCTC CGGGTCTGC TGAGCACAGG GNCCCGCCAN CCTTGA

SEQ ID NO:1361: (Length of Sequence = 347 Nucleotides)

CCTCCTACTG TCTGTCTGT GGGACAGTTG CCTCCCCCTC ATCTCCAGTG ACTCAGCCTA CACAAGGGAG GACCAACAGG
NTCTAGTTT TCCACGTGAT GGAGTTCCAA GCTTTTTTTT TGTGTTGTT TGTGTTGCA AAATAAAAC AATACACATT
CCAAGAGAAA TGAATGCATC TTTGACAG TCTCTATTTT TCATTTACAT ATGTACACAC GNCCCTTGAG TCGCTGCTGT
TGACACGGCC CNGTGTGGAC GGGTCAGGCC CGAGGCCCT CGGGAGCAGA CCTGTAGCTC TCTGGGGGAT CAGGGCTTCC
ATTAGGGAGA AAGTATTAGC AGTTTCT

328

SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCAATC ATTCAATCAA CAATATTCAAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC
 AAATTAAAG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGTGGACC
 AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAATCCCG TTINTACTGA AAATACAAA ACAAAACAAC
 AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATTNCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG
 TTAGCCAAGA TCGGACCCIT NCACTTTTCA CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGTGCAAT TCATAAATCA GCACATTTAC TAGATAGGTA GGATACTTTT NATCCATTG TGTGTTAAAA
 AATTAGCGCA TGTTCCTCTT TATGCCCACT TGTATTAGCA GAATAGTGTT TCGGATTCCT CTGAATGGNT CTGTATTGAG
 TCTGTATAGA CCCGAAGGA AAAGGAGGAA TTGCGCTGTC CCGAGAAATG CTCGCTCCAG CAGTTTANGG NAGAAATCTC
 TAAACGTTTT AAATCACATA CTGACCAACT TGTGTGATA TTGCTGGAA AAATTTTGAA AGNTCAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATGCT GACCTATTGA AAAATACCAC AGCCAGAATG GGCTAAACAG GTATATAGTT AATACAACCA
 CCACCATCCT TTACTTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAAAT
 CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCTTGA TTCTATTTA AATGCACTAG ATGGGAATAT CATGTTCTAG
 GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACACA AGCAATTTG GTATCCACCA TTTTAAATTC ACAATCTGAG
 NCTAAATGAA TGGCTATTTA TATTT

SEQ ID NO:1365: (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TCGCGCTGTA
 CCAGCATGCG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCACCA GCGACAAGGC CAAGGAGAGC ATTGAGCCA
 AGTGCGTGCA GTACCTAGAC CGGCGCGAGA AGCTGAAGGA TTATTTACGA AGCAAGAGA AACACGGCAA GAAGCCAGTC
 AAAGAGAACC AGAGT

SEQ ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCCAAGAA ACAGAGTAAT TTCTCTCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA
 TCATTGTCAA ATTTAAAGG GAAAAGGAAA GACTTTTATT TGANTGAAA GATTTTITTC AGTGTGATAG AGAGGGAAGA
 CTGAAATAAA CAGAATTTAC AACCTTGCA CCTTGCACC TTCTCTCTT AGCAGTATGG CAAACTAAAT AACTTGCACT
 GAAAACGGGT TAAAAGCTG TATACTTTTT TAAAAATAT ATTTNGTTA TGTCAATGAT CTGCACAGTT TTGAATACAA
 AA

SEQ ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA
 TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGTNTAATTA
 GTTCAACCAT TGTGGTAGAC AGTGTGAAA TTCTTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT
 ACTGGGTATA TAGCCAAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGCAATGCATG TTGTTTTCGA GCACTATTTT
 ACAAGAGCAA ACACATGGGA TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

329

CTGGGACAGA GACCTTTGCA TTGCTCCATG TGTGGGCTTC AGCTGGGACA GAGACCTTTG CATTGCTCCA TGTGTTGGGG
 CAGGTCTTCC ATTTCAATCT CCTCTGCCCT AATTTATTAG CCATACTTGT GCTATTTATT ACTTTTAAAC CCTAATCCTT
 TTTCGTAAAT TTGTTTACAT TTTGCAGAGT GCCAGCATTT TACAATGTGT CTTTTATGTC TCACAGAGGT CATCATTAGG
 TTAGACCTTT GGCTTCATGT GTCTCCCGAG AGATGGTTTA TAAAATTGTC AINCTTCTGG CACAGGTGGT GTGGCTTAGG
 GATTAGGACA CAGCCTGCCT GAGTTCACAC CTCATCTCTC CCACTTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTTCTGGTC TAAGTTTTAT TATTTCTTTT CTTCTGCTTG TTTTAGGCTG ATATTGCACT TCTTACTCCA GTTTTCTAAG
 GTGGAAGCTT CGACTATTGA TTTCAAATCT TTTTINCTTN CTAATCTATG CATTCAATGT TATAAGTTTC TGTGAAGCAG
 TGATTTTATT GCATCCACA TTTTGATAGG TTATATTTCC ATTTAGTTAC AAATAATTTA AATTTCCCTT GAGATTTCTG
 CTTTACTTAA TGTGTTATTT GGAAGTGTAT TTTTATCTC CAAATATTTA GAGATTTGCA GCTGTCTTTA TGTATTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAACATA AATNTTGACA AGTAGITCAA GACTGTTGGG ATAACTTAG CTAGAGTGCA GGTCACTAAT ACCCATCTTT
 ATAAGGAAGC TGAAAGGGA AGTATGAGGA CAGGGAGAAC AATGACTTIN TCTCTCAAGC TTGACTTAAA CCACCAGGAA
 AGTTCTTAAA GCCAAGCCT TTCTCAGACT CTCACCAAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA
 AATTCTGTAC AAAGTAAACA ACAGCTGAAG CAGGAAAGGN ACATACATTT NNTCACTTAG TGGCAGCGAG GCAAAACAGA
 ACATAGGGCC AGCTTGGTTA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTTCTINCCT GGGCGGCGAT GATCTGAGCA ATGCCCCCA CAACTTGGT TTTCACTACA ACATCGTCTG CATCAGCTTT
 GCCAAAAGCT GCCTTCTGGG CTGCACGGAC AAGATTGINT GAGGCTCTTT TCACAGCATT TCTGCGGCC TGTAGCCGCC
 TCATGGCCTC TNAATCCTGG TCGGCCCTCA CCTTGACGGC CACCAGCAGC TGAGCCGTGG AAGCGCGAC CTGCTTGGCA
 GATGAGATGA GCTTCTCTC GCTGGGTGT CCCTGAACGG AGGCATTGGC CGCCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TTTGCTTTCA GATAATGTTT CTGTATACIT TATAAATGCT ATCTGTGGTA TCTCTGTAT AATTNACAAT GTTTGCATGT
 AAAAAACAAA ACCCATAGAC CTTAAAAAAA AGAAAAAAG AATATACAC TATACATAGG CACAGCTTAT GCCCAGAGCA
 TAGCAGGTGC ATAAACACT GTTGCTATAA ATGCAAGAAA AAGGTCATTT AACCACAATC ACATTTTTTT NCATAAGNEN
 GTCTGAAATC TATACAATAT ATACATCTAT GTTTCATGT GGAAATAATA TCTTTTAAA TTTCAAGGCG TGTATATCCC
 CTGCAGGCCT GCATAAATGG

SEQ ID NO:1373: (Length of Sequence = 315 Nucleotides)

AATCCTGGGG GTGATTTAGA ACTTAGAGGC ATTCTCAAAA TGGACCAAGC TAAATGGTAG CCTTTATTTN CTGTAATGAT
 TCACCATGGG AAAATTAGTA ATTCTTTAAA CTTCTTACTT AATCTTATAT GTATTCCAAA TTINCTAAAA AGAAATTAAAC
 CTAGAGGTTT TACAGAATC CATTTTTTTT TTATTNCCA GAAAGGAAAA ATTTATCTGT NCTGTNATTT TGTAAAAAT
 CCTATTCCAG CTACTACTAT GGAAAAAGGA AAAGAAGAAA GGAGGAAAGG AAGGGAGAGA GGAAAGGAAG GGACG

SEQ ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCCAA CAGCCCAATC TGGTACTCAG TCCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC
 GCGGATCCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

330

AAAGGAAAAT ATAAAAGAAA ATAAATCTC ACATTGCTGC TTAGCAGGAG AATTTTAAA GACTTACAAA TCAACAAGCT
 GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCCTACATG GGGCTTTNAG TGTCCCAATA GTAGCAGATG TCCAGTTCT
 ATAAAAT

SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CTTAATCTAT TCAGGTCCCA ACTTTCAGGC TTCTCTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC
 TAGTCTGAGT TGGATGCAAG TTAGCCATT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT
 TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGTTAAA GATTTCTAAT TTTGACCAA
 GATTTTACT TTCTGTGTAT AGAAATGGAA ATAAACATIN ACACTTTAGG TTTTGAAAGC AACCACTCC TAACACGGTT
 CTGAGTTGGG GGCCAACA

SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAAT CCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAAT TATGGTGCGA ATAAAAAGG
 AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAATAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAACCGC
 AAATGCCCAT GANCTGATGA ATGGATAAAC AAAATTGGT GTGTGTGTAT ATATGTGTAC AAACCTCCTT TTTATGATGA
 AATAGTATTT CATTGTGTGT GCACATGTIN CACACACANT TTAAATAGTA TTTCGTGATA AAAAAAG

SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGGAATACAC TTGTGAATAC AGTGTGTAGG ATACATTAAC AGTTTCTGA GTGGGCTGCT CTTTTTCCT CAATACTGTA
 TATATTTIN TTAAGCTCTT CTTTAAAGA TAAATATTT TCATCTCTT CTTAAATCCT CAAGGATTAA CTCTGAGTCA
 CCATTGTGG TATTTTAAAT CTTTTTAAAT AAATCTCTGT ATTTGCACTT GCATCAAAAC AGTAAACAT TTCACAGGT
 AGGATCTGAT GACCATTTTA TAATCAACAT TTTTAGGTAC CACAAGAL ACTTTATGAG CATCCACTGA AATTATGGC
 ATTAGTGCAT ATAAATATCC AAAAATCCAT TTT

SEQ ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTGGCAA ATATTGGGT GAGATTGAA AATAAATTAC ACCACTGCTG CACAAGTTAA TGTGAATCAA GCATCTGTT
 ATTCATTCA GTTTATGCCT TTTTCTTT TTTTGTGAG TGCAGTTGGG GTCACAGACT CTCAATTGA CAAGACACTT
 TAAAAGCAGG AGTAGAAATT AGGCTGGGT TTTACAATA TTACAGGAAC TGTCAACA AACTTCAAGT GGATCAGTTT
 ATTTCTGATT TAACTTGGGG ATAAACAGTG TTCAATATTT TCCAAAAGAT TCTCCCCATA TAGAAGTCCC AAAAG

SEQ ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCGCAAAT TTAGCTGTTT ATTAGGTGC AAGTCTCTCC TTCTCTCCCT GCTTCTCTT TCTNCTTTTT CTCGCCACAA
 ATCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCTATTAAA
 TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAACGTTT TCAAAAGCAA AACACAGAAA CAGAGCTTCC
 ACCCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCAATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT
 CAAGCAAGGA AATCCAATCC AGTTGGGGT TG

SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTTAG TGAAGACGTG AATAGATATT NCTGCAAGA AACATACAA GTGTCAATA GSTATATAAA AGGTATTCAA
 TATCACTAAT CATCAGGGAA ATGCAATCA AAACCACAAT GAGTTATCTN CTCATACCTT TNATGATGSC TAATATTAA
 CGAGAGATAA CAAGTGTITA TGGGGGTGTG GNGAAAAGAG AATGTTGAA CACTCTTGGT TGAAATATAA GTTGGTAGAA
 CCATTATGCA AACAGTATG A

331

SEQ ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTGG GACACAGAGC AAGACTCCCT CCCAAAAAA AAAAAAATAA TTATTAGAAA GAGGAAGAGA
 GAGATGNCAA AGCCTTTTAC AGTTGGGTGT TGGNGTTAG AGACCCAGTA CCCCAGCCTG ACATACCTAC AGAAGCAGTG
 AATTTACTTA TTTACTGTTA TGAAAAAAT AGATGCTGCC AGCCGTGCAC AGCAGAACT ACTATTGANT CATATGGTTT
 TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEQ ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA
 AGATCACCCA GTAAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAAATAC
 AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAATT GTAACAATAG CAGACATTCC TATATAGATC CTATAAGCGA
 CAAGAGGGAA AATAGGATTT GCAANTTAAG CATCTGGAAT AAATATTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GCGCGTGGG CTGCTCTGGG ACCGCTTGGT GCGGGGCTGC CGCGCGACT GGTACGGAGG CAATNACCGC
 TCGGTCTCTCT GCTCTGACCA CTTTNCCTCA GCGTGTCTTC AGCTCTCTTC GGTATCCAG AAGAACCCTGC GCTTCTCCCA
 GCGNCTGAGG CTGGTGGCAG GCGCGTGGC CACCTGCGAN CNGGTGCCCC CCGCGCACC TAAGAGGGGA GAGGAGGGAG
 ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEQ ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGTGGTTTTG ACATGTAGAA AATAAGATGG AAGGCTGAAC TAGGGCAGTG GTGTTGGCAA ATAATCAGAT TTCAGGAATA
 TCACAAAGTG AGNGCCCCAG GATTCTGAC CATTTTATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAGTTT
 CTGGCTCGAG TAACTGGGAT ATCAACAAGT CATTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTG AGATAGAGAT
 AGAGGCAATA TAAAGNNITA TATATTGACC ATGTTAAATC ACCTAAATTC AGAAAGTTGT AGAAACTTG GGTCTGGANC
 TCAGGAAAGA CACTGGATAT GTAGATTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTGG GTGTTTCTCG CAGAGGAGGG NTTTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA
 AGTGAACAAA GGTCTCTGGT TTTCTAGGC AGAGGACCCC GAGGCCCTCC GCASTGTTTG TTTCCCTGGG TACTTATGAT
 TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCTTCA AGCA

SEQ ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATG GGCAGCCAGA GCTCCAAGGC TCCCCGGGGC GACGTGACCG CCGAGGAGGC AGCAGGCGCT TCCCCCGGA
 AGGCCAACGG CATGGAGAAT GGCCACGTTA AAAGCAATGG AGACTTATCC CCAAGGGTG AAGGGGAGTC GCCCCTGTN
 AACGGAACAN ATGAGGCAGC CGGGGCCACT GCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEQ ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTTT TTTTTTTTTT TTTTANITAG GCAAGAAGAG GTGTGAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCTTA
 ATACCAAAAT TGAGCTTACA ATTAGGAAT GAGTATGTGT AACAGGNTAC AGGTGACAGT GAAGATAGAA GAACCAGNT
 GACCACAGAC TCAATGTGCT CTGTACATC GCACAGTTTA CCCAGCATGA CTTTCCCTAG GAGGCCCCCT CCTCACGCTA
 GAGTAAAAGT CCCAGTTAAG TGAAGCCTAC CAGAAGAACT AGTAGAAGAA GCTTT

SEQ ID NO:1388: (Length of Sequence = 201 Nucleotides)

332

GCTAGTNATC TCTCAGACAC TTGGTCGSTA GAAAAGATCC CSCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGC
 TGCAGGSCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA
 CCTTTTINTT GGATGTGGAG GAGCGCGGGC CGGAGCATTTG T

SEQ ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGTGCCCTGT TATCTGTAA AAGAGCCACT TATGACCTCA GGTGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA
 GCAGATGTTT GGGATGACAC TAAAACTCA GTGGTGAGAT GATTCCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG
 GGAGGGTGGG TATGTGAGCA ATGGTGCCAA TAGCGGCTCT TTATTTCCTT TGTCTTCATT ACTGCCATCA GGAAGGTGCT
 ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCCTTGGGT TAACCAGACA AATAGAACTT CTTTTCCTAG ACTGTTGGCT
 TINTGGAGGT TGGCAGCCTC TATCAGAGN TAAATTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTCCTC

SEQ ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TTTGATAGGC AGATAAGACT
 AGGTATCAGC AAGACATTTT AAACAAAAGG AACATTATGT AATTTTTTAA AAAAATACAT GAAAATAATA TTAAANCAAG
 GAAGGAATAT GATAAAGAN GGATAGTTAG TAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT
 CCTAAACTAC TGGGGAGAGG TCTCATGTCA GATTTTGATT ATCGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT
 TTGTTTTGAA CTTCCAGTGT CCCNCTATTG TGGGCAAATA TCAAATTCAA ACCAAATATA C

SEQ ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGTCC TTCTTAAGCA AGGCTTACAG ACTCCAGGG AGAACAAAT CTCTTTATCT CTCTGGGGTT TTAGGACCTT
 CATCAAGTCA TAGAATTGAA ATAGAGAACA TCAATTGTNC AACTTTTTAA TTTTAATAGT TTTTGTAGTA CATAAAATC
 ATGTTATGAA TTATTTTGTA GTTTTAATTA TAACTTTTT AGCACTTTTA CCATATTCTT AAAAATTAAA AATTATGAGT
 NCTGAGAAAG CAGTGAATC ACATATAGGT ATTTGATTAA CTTTATGTG ATCTTTTACC TCAAGCTAAT GTTCTTAAA
 ATCAAGG

SEQ ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTTAATA TTTAAACAA TTTTATTCAT GAAATATGC TGTACATGC ACTCTACACA GCCTGACAC GGCACACACG
 CACACGCACA CTCTGACGGC ACGGCCACGG TACACTGCCT ACGATACGG CCGGGGACGC CGCGCCACC GCGCGTCCCG
 GCGGACACT TATAAATATG GGAGAAGGGC CAGAACTGNC GCGGAGAAAG GGGCGTCGGG GTT

SEQ ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGTTTAT TATTTCCCA TGTNCTTTAC ATTTNCATTT GGAAATATCA TTCTGACAG AAATAGNTAC ATTATACCTT
 CGAAAGCAGA AAGATCTTAA TTAATTAAAA CAGTTTACAT TTACCTTAGC ATTAGGTCTG GCTGGCTAAT TTCAAAGGAT
 TAAAAATTGC ACCNATTTGG GCCAACTGGG GTCTGAATA ATTATCCNGG GTAAAAGTAT AATATTTTAT ACTTTATACA
 TTTTGCTTCA TCACACATTT ACITTCACCA CAGTENTCAA CTTACATTT AAAAAG

SEQ ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCTTTGCAT CCCTGGGACG ATTTCCAGTT GAGCATGGTG AATAATCTTT TTGATAGGCT GTTGGATTG AGTTGCTAGT
 ATTTTNTTGG GGCAATTTGC ATCTGINTIC ATCAGGGATA GTGGCCTTCA GCTTTCTTTT CGTGTGTGTG TGTCCCTGTC
 TTGTTCTGGT ATTTGGGTAA TATTGGCCTT GTAGAATGAA TTTAGAAGAA TTCTTTTCTT TTTGATTTT TTGGAATAAT
 TTAAGAAGAA TTAGTATTAG TTCTNCTTAA AATGTTTGGT A

333

SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTTTTTTTAA GATTTCAAAC TGGGTTACAC ACTGGAAAAG GCTGGGTAA GGGCCGAAAT TTAATAAATC TGTACTGATA
 ACTAAAGGCT ACAGAGATT CATATATTT TTTTAACTTT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC
 TGTCACCCAG CATCTCTGAC GCGCCTCCT AGCCTTCGTT GGTGAGATAA CCGGNATAG TGATTCCATG CGTAAACAAC
 AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GTTAAATAA TATTGTCATA
 GAG

SEQ ID NO:1396: (Length of Sequence = 384 Nucleotides)

TGCTCCCGG GTTCATGGA TTCTNCCGCC TCAGTCTCTT GAGTAGCTGG GATTACAGGC ATGCACCACC ATGCCTAATT
 TTTGTA CTGA TGCCAGCACT TTCTTAGCAA CCCCAGCTGG TGTCCTAGTA TGCCCCCTCC AGTCCACTGT CTCGCGGCC
 AGTTCAGCGC TAGGACTTGC TTAAGAGTTT CAGTCTTGT AGCCTATACT GCTTNNACG TTTATTTAGA GATCTAGAGC
 ACTTTAACCC TCAGTGGCAA GGTGTTGGG AACTTGAGTT CGGACCACTG GGATTGSCAA ATTCCCCTCT GGGCTAGGGT
 TGCTTTAAAT GCTCCCTTCA CGTGTGGGCA ATCAGCTGAG TTTGGTCCAG TTTTCTTTT TGCT

SEQ ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTGAGTTTNT TCAGTGGCAT CCCCTGCTCC CCTGAGCACA CACAGTGTTT TCTATTTATG ACTGTAGTGC CAAGCAGAAT
 TTCCATGTNC TTGCTAGCTG CCCATCTCA CCCCTCAGGG TCTCATACTT CTCCCTGGAA GCTCCCAAG CAGTCAATGT
 GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTCA AGTGCAAAC T AAGGGAACCA GGGCCTGTTT TTCTAGTTTG
 GAAGTTTTTC TTTATCTTAA GAAAAGAGAC AGACCAAAC CAAGAAGATC AACATAACT CTTCTCTTTG TCATCACGGT
 GATGACATCA AGGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEQ ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTG GGTTTTACC AAAGTGATAC AAGTCTGAAG GTCTTCATCA GCAGTCTCCC TCATAGTCAG CGCCATACCG
 AAGAGGCCTG TCCCTCTCAT AGGGCCTTCC AGCCACTTCT TCCCCACAGG CCGATTCTIN CTGTGGCTGG GAGTGTGGAC
 TGATTGTGTA TGATGTGAGA GATCCNNGG GGTGTGAGCT ACGCACCTG GCTGAACCTT CAAGGAGAAG TTTGTGCATC
 ANTTTTCAAA AAATTATGAT ATCAAAGAT AGCTGTGCC TACATTTGGG AAAGATACAA AAACCTTG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT
 CAGAAACCAT AACCTTGCTA CCCGCACTGG GCATTGTGAC AACTGTTGAC ATCAATGCAG ACTGCAAGTN AGTTGGCAAA
 GCTGCTGATG TGTTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTTGA TTTGGGGGCA AGGGAGTNGA
 AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCAATTGGG
 GGATGCACAA GGGATGAACA CAGCTCATTT CCGTGNAGGT AAGTTTAGGG AATTAGAAGG

SEQ ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCGGCTC CTCACATTAA AGTGGGNTTA TGACCATGAA CACTTCGTAT TAATAAATGT
 CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACCTGAAT TCCATCCACA ATCCACAAC TNCCTGGNAA
 AAATNTNTCC CAGCTTCTCC TTCTCTAGC CCAAGAAACA GCCTTAACAG CGNGCGATTT CATTCCCTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAAC
 ATCCATCTTA TCCGAGCCCC TCTTGAGGC AAAGGGAAAC AGTTGGAAGA GAAAATGGTA CAGCAGTTAC AAGAGGATGT

334

GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTTATGTA CATTTGAAAA TGCCCNITGG NTACTTGGAA
 CTGCTAAATT ATTTTATTTT TTACATAAGG TCACTTAAAT GTAAAGCGGT TAAAAGACAT CTTTNCINGC ATTGCCATCT
 TAATATC AGATATTACG GGATGTTAG

SEQ ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCTA TTGATGTTA TTTTAAGAAA TTAACCCITA AAACITTAAT TCCTTAAAC AATCTCAAAC AGAAGAAGCA
 AAAGCTTGIN CTGTGCTCCA GGAAATAAGA TTCAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT
 GAGTGGAAAA AACCTAACAT TTTAATTGTT TTINCTCTCA ATAATTGTGT TGAACCATCC AAAAAAGTAT GATACAAAA
 TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGGNACA
 ACACCTAGNC TCTCCTAG

SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAC TTTGTGCCC AGGCTAGAGT GCGANGCGT GATCTINGCT CACCACAACC TCCATCTCCT GGGTTCAAGC
 GATTCTCCTG CCTCAGCCTC CTGAGCAGGT GGGGTTACAG GTGCCGCCA CCGCACCCAG CCAACTTTNT GTTCTCAGCA
 GAGACGGGC TTCGCCATGT TGGTCAGGCT GGTCTCGAAC TGACCTCAAG TGATTGCCC ACCTTGGCCA CCCAAAGTGC
 TGGGATTATA GGCCTGAGCA CTINCACTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATTTAAAGT GAGAAACATG
 TGACTCTTTC CTTTCATTG GGACACTTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

SEQ ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGCTCATCAG CTATCATTTG TGTTAGTGTA TTINATGTAT GGCCAAGAC AATTCINCTT TTTCCAGTGT GGCCAGGGA
 AGCCAAAAGA TTGGATACCC CTGACAGGAT TCCAGGATTC TTTTGTAATT NCTCAGAGSC CCTCTGTGCA TACTCCGTAA
 GGACTATCCA CATTCITTTAT TACTTTCAIT GGCAATAGGT ATAAATTTT ATTTGTTGNN TATTTTACTG NAATGTTACT
 TGTTTTGCT TATTTACTGA TTGGGTGGGA GGAAGTCAA GGATGAATAA ATCTAACCN TTTTAAAAG GAAAGGCTAA
 AAATA

SEQ ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGTCCT CAGCATGTTG GCCTTCACCC CTGGCGGTGG CTGGAACACA AAGATGCGGC CCGCACGGAG
 CAGATTCACA GGCACCTTGG GGTGATCTC CATGGTTAGG AAGAGTCGGA AGCAGGCATG CGGCTGCAGG GAATGCAACT
 TCTTCTCCAG CTGCATCAGC CACCCTGGGG CCAGATGCAC ATTCTTCAGC ATCACCACC TGCCCGANTT TACAAGCGGT
 GTTTTATTGC CTTATCTGCT TNGTTAAAGC CTTCTTCAGA GCGGATTGCA ATTGAAGGGA TCTTCGGGGT TCINCTCGGC
 TNCAAGGTC CTCGACAATG TTCCCTTG

SEQ ID NO:1406: (Length of Sequence = 392 Nucleotides)

GGACTGCCCG TTTGTTTATG AGACAGGGTC TCATTCTGTC ACTCAGGCTG GAGTGCAGTG TCATGATCAT GGCTCACTGC
 AGCCTCGACC TCTCAGGCTC AAGTGATCCT TGCACTCTCA CCTCACGAGT AGCTACGACT ACAGGTATGC CCCACTATGC
 CTGGATAATT GTNCCTTTTT TTTTTTGGT AGAAACAGGS TCTCATCTG TTGCCCAGGC TAGTCTCAA CTGCTGGACT
 CAAGTGATCC TTCCAACCTG GCCTCCCAA GTGCTGGGAT TACAGATGTG AGTCACAATG NCCAGCATGG ATTGTCTTT
 TCAGACCCAG ACCAAAGAAC AGGACTTATT TGTCCTAAGA CCAATCTAGG NAAAGTATAA GCTGTGTGT CA

SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GTTAATTGGG NTTCAACAAG AATAATTTCT CCACAACAAA AACCACAAC TGAAGNGAGT TGAAAAGNGN TCAATAGTGG
 AAACAGTCGC CTCAGTACTT TTNCTTTCTG GNTTTCATCT CTAGAAATTT NAAGTGTTN AGNCAGAGTC CACCCTTTG

335

GCAAGGCGNG AACCNATGAA TGGACTCCTT GTGIGAATTG TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA
GAGATTCAAT TTTNTGTAGA AGTAAGGGTT AATAGGAGGA TAGAATTGGG TTCCNAATCT AGTGNIAAAA GTGTCCAAGC
AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEQ ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGAGCA CCACGAGCTG ACCTCGCTCT TCGAGTGTC GGTCTGCTTT GACTATGTCC TGCCTCCTAT TCTGCAGTGC
CAGGCCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCGGACGTGC AGGGGGCGCC TGACGCCAG
CATCAGGAAC CTGGCTATGG AGAAGGTGGC CTGGGCGATC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCTGA
CCCTGCACCA TACGGAGAAA CCAGAATG AAGACATATG TNAATACCGT CCTACTCCT GNCCATGTCC TGGTGCTTTT
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC ATNTNAATGG AACGGCCAC AAAGAGCA

SEQ ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAATC CTTAAGCTTT GTTAATATGA GAATGCTTT ATCTCTTCTT TATTTCCAAA GGACAGCTTT GCTGGTTAAA
ATATTCTTGG TTAAGTTTTG TTTTATGATC TTAGCATATA TCATTCCACT CTCTCCTGGC CTGTAAAGCC TCTGCTGAAA
GATCCACTTC TAGCCTTATT GAAACTCCCT TCTATGTTAT TCGNTTCINC CTCTGCTGC TTCCAACATC CTGTCTTGT
CCATAATTTG TAACAGATTG AATATAATAT GAATTAGNCC TCTTAGACT GAATCTCATT GGAGNCTTTT CACCCTTCTT
GTTTTGGGT ATTTAINTCT TTTACAG

SEQ ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTTAT TCTGCCTTAA ATCAATGGCA AATAAGTCAA GATGACATTT TGTGAATGTA GACTATGGAT AACTCCTAA
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TNCGTGTTATG TAAGCAATTA TTTTCCCGTG TCTTATTGAG
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTTCTT TGCATGTGGG TTCCATATAG GTGCAGAAAT TTCTCAGCC
ACTGGAGGGA TTTCGACCAT ATTTGTCATT TGGATGAGCT GTATTAGAT TGAAATCTAC ACATCATTTT ATTAAAAATT
GTGCCCTAGA AAACGCAAAG CTNTGCACA ATGGCGATTA AAATTATGGG

SEQ ID NO:1411: (Length of Sequence = 385 Nucleotides)

GTCTCAAACT CCTGACCTCA GGCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT
GGCCTATGAG TGGTCTTTTA ATTAGGAAAT TTACATTTTT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTTT
TTTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCCAGG CTGGAGTGCA GTAGTGCAAT CTGGCCAC TGCAACCTCT
GCCTCCTGGG CTGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCACCGC AACTGGGGTA
ATTTTNGTGG TTTTATGATG AGAATGGGGG TTTTGCTAAT GTTTGGCCAG GCTTGGGCTT GAAAT

SEQ ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTGAGAT TCCTCCTGGG CCTCCTCGCC CCATTGCGA CAGATTGCT ACCTGCTCCA GCTCAGCGAC CCTTCCCTCT
ATGATGAAGT GCATTGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTTATTCTC CCCATCGGGG CCACCGTGAA
CATGGACGGA GCAGCCATCT TCCAGTGTGT GGCGGGGTG TTCATTGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC
AGATTTTCAC CATTCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GGCGTNCAN CTNGAGGGGT CCTCANCATT
GCCATTATCC TGGGAGG

SEQ ID NO:1413: (Length of Sequence = 367 Nucleotides)

ATAAGTGGAG TGAAGAAATT AATGCATAGT TCAAGCCTAA ACAATACAAG CATCTCAGC TTTGGAGTCA AACTGAAAA
TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTAA TGTGGCTGGA TATTCTCACA

336

ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA
TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCATT CTGACCTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT
AGNCCAGTCG ACCCATGTTT TCCTTTCTAC ANCAGCATTG GACGGTG

SEQ ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTTTAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC
AGAAGGAATC TNTACAAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC
CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC
CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCTNIGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC
TCTGCATCTT CAGACAGAAT TNCTAGCCTG CCTNAGGAAA

SEQ ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAACACA GCATTGAAG TCTTAATATT TTAGTACATA CTATACTATC TCINCTTACA ATTGTTTTTT GTTAAAGAAA
CCATGTTTTT NATCTAAAG AGTTTCCTTT ACTGTGGATT TTAGTGATTG CATCTTTGTT GATGGGTTAA GATTGTCCNN
ATAGCAT TAGTNCITTC AATGTGCTGT ATTCACTGCT GCCTCTGGGC TCCTAAACTG TGGAGGGCTG TTTGTCCCTA
TAAATGG GGACAGATTG TCCTGCTTTT TAATTTTCAA TGCTGACTT TTACCCNCTA ACTTTTCCGT AGAT

SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTTT GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACCT TAGTTTTGAT GAGATAACCT CCTTATC...
TAAAAATGGT CTCTATTATT TTCCAAGAGA AGACCAGTAA AACTAAACA CCTGCCTTGA TCTCAGTGTC TTAGATGTTT
TCCTGTTTCT CCTTTATCCT AGCAAACTCC CCAGGTGCT ATTCTTATTC CCATTTTATA GATGGGCAAC TGGGTAAGAG
AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCCCC AAGGTTCCAC
TGGGGCATCT GAAGGAAGGG GTTCTTGAA GTGCAAAATA TAGGGTACTG

SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTCCTTCG CCAAGGGAGC CATCAGCACC AGTTGTTCCA GAGCAGCCAC AACACCAGTG ACCTCCCTTC TGCTTCCGGC
CAATCCCGAC AGAGCCTCTT CCCGAGTCTT GAGCTCCTGG ATAGCTGCCT CAATAAAGCA GGACTCGGGA GTGTGCTTCT
CCTCTGCCAG CTGCTGCTCT AGTGCTACTT TCTCCTCCAG AACTACCCGG TGCAGCACCT GCTCCTTAGA GGCCAGCAGC
AACTTGGAGT ACTGGCTGTG CTGTTCATCT CCTAGATGAA TGGGATGGTC TACATTCATC CATTTGGGAT TTTGGGCAAA
AGCCACCAAC AACCCCTTTT TTTCCTCTTT CAATCAAGCT GCAAT

SEQ ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGTTTACAA AGCTGTTGGA AAACTTTGTG TCCTGATTTC AACAAATCAG CTTTGTTTGA AAGATGAGCC
AAGCTCACAG AACTAAATT TTATGTATG CCATAAGCTG GAGAGGAGCC ATTTGGCTAC AGCTCGGGA CTTCATTGAG
GAGCAAATGA AAGGCACATG GACGAGCAG CTGGTGCACT TCATGTTCTT CCTGCCTGTG AATTGAATAC TGTCCTGGTA
GCAGTTTTGG GTCGGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAGAATT
AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

SEQ ID NO:1419: (Length of Sequence = 363 Nucleotides)

GTGGAAAACG TGGAAATGAT GTGGCCACTG AAAGAAATTC AAGACAACCTG AAACAACCTGC AGATTTCCAT TTTCAGCTCG
TGTTTTCTTA TGAACAATAA CATTCAGAA GGGGAAATAT CAGAAAGTTG ATTGATTTTT AACCCAAAAA TAGAACTTTT
TGTAAGCTAG GAAAGCATCT AAAAATTAACA AGAATACAAA AATGCACCTT TGTTTACATT TGCTCTATTT AGATCTTACA

337

AGAGATTATG TCTTGAATCT ATCCTGACTT CAGCAAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCCA AATCGTTTAC
AGGAAGTTAC CTAAGGAGNC TGACAGATTG AACGGCTGCT ACC

SEQ ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTTTC TAGAAGCAAA TAGTGCCACC ATCCGTCATG AGGNTCTGTT TCTATAACGC TTGINTGTCT TTNAGACTAC
GTAGGTGGTA GCTTATGAGT AGTAATGTC TTTTGTAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC
AAAACTGTN TTACTATTCA GGAGAAAATG GACGGTTTAG CAACAATACA ATGTAGACTT CAAAATATGA AAAATCAAGG
AAATTNCIGT CATGTCTTT AAGGGCCTCC AGAGAAGTAT TAATTTGTCC TTTATGTGAA TTTAATGAGA TCATGTGAAA
TGATG

SEQ ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAAGTACA GCAGGTAGA NTCCACCTCT NTCCCTGCCT
GCNCTGGGA TCCAGTATTG GCCCATGTAT CINCCTCAT TCCTCAGGCT TCCTGGACTT TTTTGGAGG GAAAGAGGAA
CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGGAGACGG
CGCTTGTA GAGACAAGG GAAGAGACAG AACAGGAGT ATTCTAAGAA GCAT

SEQ ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TTTAATAGCT GCTGCAAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATTGC CTGTGTGTGG
TTATAAAAC AAGGGACATT AATGINCTG TTCTGTATACC ATAGTAATGT GNAAAAAAA ATAGTGGTTG NAATGGTGT
TAATTTGTAC AGTTGTGTG AAAGTAGAAT GGGNCAGATA TTTTGGTGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG
NCATTTGGTA TGATAAAGG NGAGAATCTT AACAAATGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEQ ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTT AGGTACCTTC CAACACTAAA
ATGSTATGAT TCCAGCTTA CAAAAGCAA ACTATTTTAA TATTCACCAC TCAATATAGT GTATCAAGCT CTCGGTTTAT
GTTAAGGGC TTAGGGNACA GCAGCAACTA TTCTGTGGCA ATTAATNCAA AACTCATGT TACCAAAAAG GCATGTTTAG
GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEQ ID NO:1424: (Length of Sequence = 297 Nucleotides)

GGAGGATTAC TTGAGCCGAG AAAAAAAAAA AAGCCTCAGG GGTTTCGGTG AATGTTGTGT GGACTTCCGT GAGAACAGAC
GTTTGATGTG AACTGANTTC AAGGCTGATA CAGCCAGAA CCAGGNACAA GGTGAGAAAC TGCTCGTTTC CGGGAGGCAG
GACTTCCTAA CCGGGAGGCA CTGCAGTNCA CTTTCTGAAA CAGGTTTGA GGATAGGGAA ATTCTGNCA GCCCGGGGG
ATCCACTTAG TTTCTTAGNA GCGGCCGCA CCGCGGTGA AGGCTCCAGC TTTTGT

SEQ ID NO:1425: (Length of Sequence = 276 Nucleotides)

ATTTTTTCAA GGATGGAAAG GTCAGAGAAA AATAAATAA AACATCTTTC AATAGTCTTT CCTGGTAAAA GCAGCGTCTC
TNTGGGCTGG GGAGTAAAGG GTGTGGGCA AGGGGAGTGG GGAGAGGCTG TAAACCTTCC CCCAAACCCC AGTTTTAGAT
CCTTTGGTTT CCTTCTCCA GAAGATGNC AGAAGGGCAT NGTGGGNAAC AGCAGGGNGG AAAATATGGT GATGACAAAC
CCCAGATGAT CAAGGGGCTG ATGCTCCTGG GGCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

338

TAGTGGCATA TGGACCGGAA AGGGTTAATT TAAAGGGGGG GAACCTCAAA AGTTTTTTTA AAAAAGAAAC TTGTCTGCCA
CAGTATGTTA CCAGTGTTAA CCCTTCTGCC AGTTAGCAAA CTTTTCCTT AAGCCTTTTT CCTCTAGGAT ACTCCCCATG
TTTCGGTAAT CTGGGGCATA CATTTTTTAA GATGGACCT CTTCGCTTG TTTGTTTTC ATGCTGCTGT ATGTCCAAGT
ATTGTTAATT TCATAATAAG ACAAGAGTTG CTTCCTTTT TAATTCCTTT TTCCC

SEQ ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACCTT TCTTTAATAA GATTCAGGCC AGTNTGGTG GGTGINTGCG GATGATTGTT
ACTGGNGCAG CCCAGCATC ACCAACAGTT CTGGGAATTT CTCCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT
GGCCAACTG AGTCCACAG CTGGATGTAA CCTTNCACCA CTCTGG

SEQ ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATCTC TCCAACCTCC CCAGGTCCA TCAGTGTTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC
CGCTTTGAAT CCGTGCCCTT TCCAATTGNC CCTTATAGCA GTCGATGTCA GGGATTGGGA CAACTTTCAA AACAGTCCA
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGAGNCAT TGC

SEQ ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGGG AGACAGAGAG AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACCGAAGTGG
CTGTINTGAG GTAAGGNGG CAGGATGACT CACAGGTTTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC
AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGGTTCT GGGGGTATAA CATTGATAGG CC

SEQ ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTTCC TGTATCCTTT CATGGGTTT CTTTGTGTTG TTTTGGTAAG AACATTTAAC ATGAGATGTA TCTTINAGTT
GTGTGTGTTG TTGANTTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG
CTCTGTGACA GGCTCAAAC TCCTGGGACC CAAATGAATC CCTCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA
GATGTG

SEQ ID NO:1431: (Length of Sequence = 364 Nucleotides)

CTTNCCTCTC GATGATGCTT CTATAATTTT GCCCTTTAAC AGAAACTTTC AAAAGGGAAG AGTTTTTGTG AATGGGGGAG
AGGGTGAAGG AGGTCAGGCC CCACTCCTTC CTGCATGTT TACAGTCATT GGAATAAGG CATGGCTCAA ATCGGCCACA
GGGNCGGTGA CCTTGTGCCC CAGGGTTTTC CCCCCAAGTG CCTCCATTIA AAAGCATTAA GGCCGGTACG GCATCTTCAA
AACAGAGGGC TGGCATTCGA GGAAACCTT GCTGCTTTAG TCCCAGTAGG GTATTTGAAC CCCGNTATA TTTTAAGGCA
TTTTAAATTC TCTTCCCCC ATTTTATTGA CTTTGAACAA TTAA

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GTGAGTNAAC ATGGATGGAA ACAAAATTATT AGGTGTGNTA AAGTGAAAAA CACCAAAAT AAGATTTAAA AAGAATGTCA
GGTATCCATA GAAAAATATT AATAGGTCTA ATACATATGT AAAANTTGGC GTCCAGGGG GNAGAGACTG NAAAGTTATA
TTTTNNATGG CTGAAATCCC CCAANTTTA ACATAAAGCA CAACATT

SEQ ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGTTTT TAATGCATGA AGTATACTTG TGATCCTGGA GGTGGGAAAA GATTCAGTAA AGATAAAGTT TGGCAAAAA
GATTCCTNCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT

339

CCTAGATTGA GTTATCTATC AAGAATCAIT CATTCCTCT CAGCCCTTGC AACTGTTTCC NATGACTTTC GACTTGGCCA
TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTTTG ANCTTTTCTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CTGCGGCTTC CAAATTAGTT
CCAACAGTTC TAGTATTTTT TTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTTTAC TTTGTGATTA AAACAAAAGT
GAAATGCATT TAGTCCCAGG AAATGNCAT CCTTTCTGCA TCTNACTTTT TTTTGCTGTG ACCTCGAGNT TCTCTGTCC
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINTCTT CAGGCCCCCA CGGACGGCAT GCCTGGGGAA GCCTAGTCTA CTTACCATCA
GCACGTTGAT CTNTACACA GCATGGAGCC ATAGTTTACA AAGGACCACG GCAGGTCAAG GACAGGCCAC TAAACTTTT
GGTGCTGGGC ACATNACCCA CCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

GGGAAAGGTA TATTAACCTT CIGCATCAA GATGTAACAG TCATGGGGTC TTGGTGGCCA TCTGGTCTGA GTTAGGTACA
GGACAAGAAA GAGTCAATTA ATCTATAATA AAGATCAATG ATTGAAAGAA GGGAGATCTG GTCTCTGTCT CTCCTAGTCA
TTTACAGAAC AAGAGCAATG AGGAAGACCG TTATGCTATA ATCTAAGNAA CAGAATTGGA AATATGCTAC TGACTCAGTC
TCCAGGGGCT TAACCTCCCC CTGGCATAA TAAATTAAAG GAGTCCIAAA ATTTTATTTT CCTTACATT GG

SEQ ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC
ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACACGTT CAAAGTACAG
GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATG TAATAAACCT
TTAANGAAAC TTTCACTTCT TGAGTTTGG GTATAGGAAT CCAAAAAAAA AAAA

SEQ ID NO:1438: (Length of Sequence = 311 Nucleotides)

GGCCCTTGA CTTTGIGAAT GAGCAATG AAATGCCGC TACTGATGCT TCTNATGATC AGAACTCTTT TTTAATAAAA
TAAATAACAT AAATCGTTGA ACATAATGTT CCGTTGAAT GCAAANCAA AAAAATATGG NAAACATTT GNTAAAAATT
TTCCNGNTA AAACCATGAA CANTGGCTAT GATGAAGGTT ATTACATATG GAAAAAAAC TCACACAAGC ATATTTGNAT
TTGGCTTGAA GGAACCCAT CATTAATGC AANGCTAGGG ATTCTTTTNG AAGCAGTTGA TCCTCAGGTT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CGTGACACAG TTGAAGGAGT CGCTAAAGA AGTCCAGCTG GAGAGAGATC AATATGCTGA ACAAATAAAA GGAGAGAGGG
CCCAGTGGCA GCAGAGGATG AGGAAAATNT CGCAGGAGGT TTGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG
GTAGAGGAGC TNGAGAGGAG CTNTCCAGA CTCAAAAACC AGATGGCTNA GCCACTGCCC CCGGATGCCC CAGCAGTNC
CTCTGAGGTG GAGCINCAAG ACCTT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GTTTACTCT TGTGAAGATA GCACTTAAT CCTAAATGAG CATGTAACGT GTGACAGATC CTATATCAGT TTTAATAATT
GAAGCAGATA GTAATACTA GATTATTGAC ATTTTNGT CATGTGTTCA GCTATTGCTT CAACTTGCT CAAATTATAC

340

TTGGNATTTT ATAGTGTTTT ATTTATTATA TACTCTNCTT GTAATAANNT GGTAATCTAG TTTCCAGAAT CATGCAAATA
G

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGTGCGT CCCTTCCATG TACTGTAGAT GAAATAGTAT
ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCCG GCGCTGGAAG AATCTCTGCT ACCAACAGT GATAGAAAGG
ATTGTNTCCA AAGCCATCTG CTCTCAGGGC TTCTTCACTG ATAGNGTTT TTTTCAAGNA ATAATOCATG CTAAGAATGG
GGTATTT

SEQ ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAATT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG
CCTCCTAACA CGTATGTGGT CACATGTGCA AAGACCTNTA TTACAAAATA TTCAGAGCAG NATTTCTINTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAAACAAAT GTGCAGSTTT TTATAACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTTAAAAAAT GGTCTTAGTT
AGGCTTTCTC CTTTGTCTT TTTCCAGAAG AAACCTGGAG TCTGTCAAT TTACAAAAT ACCCTGTTGA GATTTCCTT
GGCTTTGATA AGGGTGAATT CACAGATTAA TTCCGAAAAG AATTACGGC TTTCTAATCA AATTGTTCTT TCCAGGGGNT
TTTGTGNTA TTTAGGNCCT TCTAAAGGTT AACCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAAGTGAAT CACAGGGCCA AAGCCCCCTT TNCCTCACGT GAAGCAACTC AGTAAGATGG CGGTGCAGTG AAGCCTATTC
CCACACACT CGGCACTGAT GGAGCAGTCT CCAAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCTTCCTT
CCCATANCTT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEQ ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TTTTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC
AGTTTGAAGG TGGCCCCGTG NCTGTTATTG CACCTGTNCA GGCATTTCTT TTGAAGAAGC TCCTGTTTTT TCCGAGAAG
TCTTCTTNGC GGGATTTTTT AGAGGANGAG CAGAAGGAC TCCTTTGTCA TACCTTGTGT GATATTTTAT AAAGTGCTT

SEQ ID NO:1446: (Length of Sequence = 243 Nucleotides)

TGCAGGGAAT TTNTGATGC AAAACCAGGA AACAATTTAT CTCCACTGGG AATACTTTGA AGAAGGGATT AGAGCGGGGC
TAGGGCAGGG AGGATCTNTA AAAACAATA TTTGCCAATC TAAAAACACA TAGGCACACA TGGGNATTAT TTTACTTTCA
ACAAGTTCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATTT AACACTNAG NTTCAGGAAT GCTAAAGGAG
ACC

SEQ ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGTTATAAAT GAACATCTGT TGCCTACTTA ATAGGTCAAT GAGTAGCTGT GACCCATTCT TAATTTGTAT GTAAGCATAT
TTTTTACATA TTTGTATCTA CTTCAATTTT CTTGAAGCT TGCCAAATG GTACACTTCA GTTTGAAGTG ATGCTCTTA
TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTTCCT TCCACCTAGA TTGTCTCAA AGCATTTGTT TTTGCTGGAC
TTTCCACTCT TGACCATAAG ATGTTAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTTG TCATCTACAG
TTAAATCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

341

SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AAATTTGTGT CCTGTAGGAA ATGCTTCCTT GGGTGTTTGT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG
 GTTGTAAGGA TTAGTCAGAA GTCATGATGA CTGTCCTATA TAAATATTTG GCCTATTAAAC TAAAATTAGT ACCTTNCCAT
 TTCTCCNCTT TCTTGGGCGG GGCAGCGGGG GAGTGCAGGG GAGGGGAAAT AGGGAACGTN CAATTGINTT TTAAGTAATG
 CTCATAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATACG GGGTACATCT ATCTGGCCTG
 TCTCTAGGCC TAGACAGAAG GAACAGGGAG GGTATTGT T AACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GTGTGGGGAG GGACCCGGTG GGAGGTAACT GAATCATAGG AGCAGTTTCC CCCATGCAGC TGTCNGGATA GTNAGTTTCT
 CATGAGATCT GCTGGTTTTA TAAGCTTCTA GTGTTTCCCC TGCTGGCACT CATTCTCTCT CCTGCCACCC TGTGAAGAGG
 TGCCCTCTGC CATGATTGTA AGTTTCTCTGA GGCTTNCCTA GCCATGCAAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTTNCCT TCCCTGTTTT GTTTTGTAAC CTAAGGAAGC AGAGCCTCTG AGACCACACA CAGCAGCGTC GCCCGTCCCC
 AGAGGCACCC CGGCCAGGAC GGCAGGAGA GGAGACCCCC GTTCTGTCAT GCNCTGTCGC CCGGCCACGG TGNCTCTCCG
 AGGGTGAGGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

CCGCTGTTC CTAAGGCGCT GATTAAACTT GCCTTCCTGT CCTCCAAGAC CAGATGATGA TTATTCTCCA CCGTCTAAGA
 GACCAAAGGC CAATGAGCTA CCGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC
 TTGAGAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTGAAGA ATTGTTTGAA AGGAAATATG CTCAAGCCAT
 AAAAGCCAAA GGTCCGGTGA CGATCCCGTA CCCTCTTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCTCG
 AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAAGGG AAAGGATTGG
 TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TGCCTAGAGA GGGGCCGGGA TTTAGAGAGC TGTTCTCTCG CCTATCTGAT CGCCTCCTCA GACACTGATC TATTAGTCTA
 GTGCTGCAAT TACTTGGATT GTAATGTTTC CTTGCAATTT TTGCTTTTCA AATTCTTTTC ACCCTAAACT GTAAATACGC
 CAGGAGTAGG TAAAACTTA CAGGTAAACA TTGCCAAGAN ATAAGGATTT TNAATGCTTC TGCTCAGTGG CATAACTCAA
 ATCACATGAG ATAGATTTCT TTGCATCTGT CCATTGTATT TCTCTGAGGC TAATTTACAG CACTTTGTCA CGTTAGGNAT
 TTTTTTTCCC CAGTGTCTGT ACTCTCCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GTGCCCCCTN CTGTCTTTCT GTNACCCAGA GAAAGCTTCA CAAGCATGCC TGAATTNAG TTGCACCATT TTATTACAGC
 TGAAAGANTT GANTGTAAAG AAGGAAGTTT AATAGANCAAT ATAATNCAGC AGATTTATTG ATGGGGAGGT ATCTATTGTA
 GTTTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTIAGGT AAGTCGGATT TNCITTAATA AGAGGCCCAA GAGTTAGTAC
 CTCAGGATTT TGTTTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTGCTCTGT CGCCAGGCT GGGTGCAGT GGCGGATCT CTGCTCACTG CAAGCCCCGC CTCCAGGTT
 CAGGCCATTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCACG NCCAGCTAAT TTTTTGTATT

342

TTTGGTGGAG ACGGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCGC CTCGGNCTCC
CAAATTGCTG GGATTACAGS CGTNACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA
AAGGAATT

SEQ ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANTT GGCCGGGCAT
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC
TGGCCAACAT AGTGAAATCC CGCCCTACT AAAAATACAA AAAATTAGCC AGGCACCTG TCACAGCCC CCACACAGAC
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTTNAG
AAGCAGGCTC ACTACCAGN TA

SEQ ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TTTTAAAGGC AGACTCGCTC TCTTTTTTGC
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCTGCTC GCCTCTTGAA TACAAAGGCC TAGTTCAAGT
GTTGCTTTTT TNATTTCAAA TCAATTTTTT CTCTTTTCT TTTTGAGATA AAACIATTAA AAGTACTACT ATATATATAA
AANCTCAAAT CAACTTTTCG GCCTCCTCCT CGGTACCAG GGAGTATATT CTGACG

SEQ ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAAGAAC TCCAAAGAAT CAATAACAAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT
GCTGTCTTGG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATTC GACATCCGTC CTCCTGCAGG
TGGTGGAGCT GCTAGGAAAC TTCTTNTGGA CCACGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTTTCCA TCTCCTGGCA
GAGCTCCTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGTNCTCC TCANTCGCCC TCCA

SEQ ID NO:1458: (Length of Sequence = 254 Nucleotides)

GTTCACSTCA CAGAIGTTC ATTATCACTA TTCAATATTA TTAAGCATCT AATAAGTATA AGGATGCATG AGTCAAGGGT
CCCTACCTTC AGGTCCGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT
AGAATCCGGC TGGGJTGAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCTCTAA AACCACCCAG
CCGCGACACA AACT

SEQ ID NO:1459: (Length of Sequence = 343 Nucleotides)

AGAAAGGCTC AGGGATTAAG TAAAAAGGCT AGTACATCTG GGCTCCATTC CATIATTTAG TCATCCAAA GAAGTGAAGT
GGAGGATAGT GAGCATCTAG TATATGCCAG GCACTAGACT GGCTGCAGAG GATTCAGAGA TACAAAAAC ACACTTGTA
CCAATTTAAT TTGAATTTAC CAAGTTGAAT GGCAAAAATA TCTTAAAAAT TTAGATGCCT TGATAAATGT AGTGGTATAT
TATGATAGCC ATTCTATGCC TTGAGATACC GTGTATTCTA TATTGTATAG TTGAGGGATT GAGGCCAGTT GGGAGGAATA
AATTATAGCT TGTCCTTATC AGG

SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GTGTTTTTAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAG GACAATTTAC AACTAAGAA
TAGTAACATA GCTTTCAGCA TCCTGTGCTT GANCATCACA CATCTACAAG TCTTTCAAGT CTAATGCAA CAGGAATGTN
TCTGGAGACC NGCAAGAACA TCAATAGAGA GCACTGATCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCNCAC
AACGNATTGT TAGGGAGGAT TTGGGAGAG CAGCCCCTTT GCTTAATACA TTTGGACCCC TTTCCCTAA GTTGAGGTTT
AACCCTTGAA TGCAATAACT TGGCATAA

343

SEQ ID NO:1461: (Length of Sequence = 343 Nucleotides)

TGGGAAGATC AGGTCTTACT TGTTTTCTG TCCCTCCAG CGCTAGATCA ACACAGTGTT AAATTAGTTG AATTTTCAGTG
 GAGGAGATAA GACAGAAATG AAATCTGTGA AGATTCAGAC TTTCCTCAAGT TAAAACCACT CTGAGTTAC AGATCAAGAT
 GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGTCCCT TTCTTTTTTT
 GCCTCCGCCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTTTA GGGTGTGTAC ATGTTTTTCA
 ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GGCATGGAGC AGGCAATGAC TTGTCATAG TCGTGCAGT TATGAGCACC AGCTTGAAC TAGGAACCTCT TATAAATTTT
 TGTTTTCAAC CAAGTATTGA GTGTCTGCTA TGTGTCAGAC ACTGCGCTAG GTGCTGAAAT CTCACITCTA CTGAGGAAGA
 CAGGAACATA AATGGTGATG ATCATTGCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA
 GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCTCTA AGGTCTNATT GCAAAGGTCA
 TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTCTCTCA GGATAAACAC GAGCATGCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC
 CCGGGACCAA CACCGAGATG GACACCTGCT TGGTGTCTAG GTAGGAGTTG GAGTGGCTCC CGGTCTCCGC CAACCCAGTG
 CTGTTTTTAC TGTGCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TCGTCATTGG AGAGGAGCAT
 GAAATCCTTT CTAAAGAAGT TCACCGGCT CTCACACTTN AGGTGCTCTA TCAGCACTTC GGAACCCAG CNTTCTGNC
 ACTTGCTTGA AAGGCACAAT TGTCAGGAG CACTNCCAGG GGTTCCTGT GAGGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCGTCTC CTGACAAGGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC
 AGGCCCTGGN AGCCACGAAA GCCCTCCAGA TGCCTTGAGG ACGCCGTCTN TAGCCGNGTG GGCCACGNC GGGTGGGGAC
 AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTTACACAAT CAGTATAATA CTGATAGGAA AACTTGACTG AGTTCAGAAA ANGAAAACGA AGTAGAGATC TCACTTGCAT
 CAGAACAAA TGTCATCTA TTAGCAGATA ATATTATCA GTATTTTTTG AAAATACAAT ACCACANGAA AGAAACAGTG
 GACATTTGGA GGGCTTTGAG GCCTGTGGTG GAAAAGGAAT TATCTNCCCG TAAANCTAG ATAGAAGCAT TCTCAGANAC
 TTGTTTGTA TGTGTGCCCT CACTGACAG AGTTGA

SEQ ID NO:1466: (Length of Sequence = 375 Nucleotides)

GGGTTTINAC CATGTNCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAA GTGCTGGGAC TACAGGTGTG
 AGCCACTGTG CCGGCTGGT TTTNTTTTT TNAATGAACA TGTGCAAAT CACGAGAGC ACCTNINATT CTGCATTINC
 TGGGTATAA CAAACATTGT CATCTCTGCC TACATTTAAA AGGCTCTGGT GTTATTTTAA TATGCTTTT CAATTAGTA
 ATTAATTCTA ATTTTCTTT GAGCTGAGAT GTTATTCATT GTTCTCTAG AGTTGCTTTT ATTTGTTTAT ATATGTTTCC
 CTAGCATGT TTTTGTATC TCTAGTTAT TAGATACCTG AACATTTGAC ATTGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

344

TGATAAAAGG AAAACGTTTT GATTATAGT ACCAAGTGCT TAAACACAAG GATAGTGITA GATTTTCGAG TGACTTTCCT
 TTTTGCAATT TTTGGCAGTA AAAGCCAAAC GTTGATTTTG TCCTTTTCAG AGTTGTCCAG CCCTTTTTTC CTTTGTCCAA
 AATGATTCTA AATAGAATCT AATAAACCA TGTAGCATT TTTTTCCTA AATGAAGCCC CAAAAAGAA AAGTGCCTTG
 CATCATTTAA AAAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGTATG TAGGGCACTG AAAAGTTCTT AACATTTTT

SEQ ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAACA TGTATAACCA ATTAACATGG CCTAGGGTTT TCTTTTTATT GGTATTCCT TCACTAACTT
 GAATCCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCACAAAG
 GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAAGTGTCTT AAAAATGCAG AAATGTAAAA
 TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA
 CGGGNTCAA GTGACAAGCA GTAAGGATCC TC

SEQ ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGGAGT CTGCTCTGT NACCCAGGCT AGAGTGCACT GCGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT
 CAAGTGATTC CCTGCTCA GCTCCCAAG TAGCTGGGAT TACAGGCGCC TGNCACCGCA CCCAGCTAAT TTTTGTATTT
 TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACCTCT GACCATGTGA TTCACCTGCC TCCACCTCCC
 AAAGTGTGG AATTACAGGT GTGAGTACC ACACCGGCC GGATCTGTT AGTTTTCTTT AATGCATATT GAGTTTCTTT
 AGTTTTAAACA CACTTAT CTGGTTTGA CCCAACTAT TCACTATGTT TCTTGGGGA NAGCTTGAA TCTTGGGGTG
 GNAGCCAATT AGTAATAGC CAGGGTG

SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGTTTGA GTCATCTCTG GGCAACANAG GAAACCCCG TCCTACAAA AAGAAAATTT GGTTTTATA TTTATTTGTA
 TTAAATTTTT TAGAAACATA GCTGGGCATG GTGGCACAG CCTGTAGTCC TAGCTACTCA GGGGGCTGAG GTGGGAGGAT
 TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTGAT CACACCACTG TNCTGCAGCC TGGGTGACAG AGTGAGACCC
 TGCGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTGTAGA AATGAGTCT CACTATGTTG CCCAGGTGG
 TCTTGAAGTC CCGGGCTCAA GTGATCCACC TGCTCAGCC TCICAAAGTG CTGGGATTAC AGGCATGAGT CACAGTCCCT
 GGGCCCAAT TCATAGTCTT AAACAT

SEQ ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAATATTA AAAAGACCAG ACCTTAAAG CAAGANTTGA AATACCTAGT TGTAAGATG TGGCACCTGT GGAGAAGACT
 ATTAAGTTGC TTCCAGTAG CCATGTTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA
 TCAGGATGAG GTTAATTTGA TAGCGGGTGA TATTATGCAT AANCTTATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA
 TCAATATAAC ATCAGCTTTA GCAGAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT
 CTGCTTCTCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCCTATTT CC

SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTTGCTCA GGCTGGTCTC AAAGTCTCTG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC
 AAAGTNTAG AACTGGCCAG GGGTGGTGGC TCATGCTGT AATCCAGCA CTTTNGGAGG CAGAGGCGGG CAGGGAGTTT
 AAGACCAGCC TGGCCAACAC GGTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCTCT
 AATCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGA GCGGAGGTT GCAATGAGCA GAGACGGCT
 GGACGACAGA GT

345

SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTTGAGCCTG CAGAGGCTCA CGGCCACACC
 CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCCGAACCGA TGAGGCACAG TAGCCAGGCC CTCCCGAGGG CTCCAGAAGC
 TCTAGGTTTA CGGGGTCACC TTCTGTAGG TGACGTGAAG ATGCTGAGTC ATTGGCTGIN TCGTGGTTGC CATGGAGACC
 GTCIGCTCAA GTTTCCTTC AGAATTCAGC CTGAACCTCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT
 CCTGGCGATG GAGTGGGATG CGATGCACAG NTCCGTGCCG TTCAACTCGC CCTCCINCACT TTCCANCAC GGCTGTTTTT
 TTGGCGTGAC AAAAGGCCAC CTTTTGGTG TCGG

SEQ ID NO:1474: (Length of Sequence = 402 Nucleotides)

GACGTTNAGG TGGGAGGTTT GTTTGAGCAA CATAGTGAGA CCCCGTCTCT ACACAAAAC AAAAAAATA AAAAATTATC
 TGAGCATAGT GGAGCATGGC TATGGTCCAA GCTACGTGGG AGGCTGAGGT GGGAGGATTG CTTGCNTCCA GGAGTTCAAG
 GCTGCAGTAA GCAGTAATGG TGCTACTTCG CTTACGCCTG GGCACACAG CAAGACCCTG TCTCGAAAAA ATAAATAAAG
 TAAATAAAGT TGAGAATTTT GTATTTTGGT ACAGAAGGTC TATGCCTTIN AAATGCTCCA TTGGACACG CTTAGGGCAG
 GACGCTCTGA AACTGGGAAG CCTGSGGCC TGTACANTCT TGGCTGTCCC CTGTACANTC TCCTAACTCT AGAGGGCTGG
 TT

SEQ ID NO:1475: (Length of Sequence = 324 Nucleotides)

TTGCATACCT GTGCTGTGTC AGACCAGGCA GAGTCATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TTTAATTAAAC
 AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGGAACTCTC TCTGCCCCCT TATCTCTCT CTCTTTCACT
 CTCTCTCAAC TAAAAATTTT CCTTAACTAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA
 TACAGTCATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGTACT TTGGATAGTG ATACACAGTA
 TAGG

SEQ ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACCTCAAAA TCAGAGTGCC TCTCTCCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG
 GACAGAGAAT GACTTTGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTCGAA
 CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATNGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA
 AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CTTGAAACTG ATTATGACTG TTTTGAATG CATTTTGATT CCTTAGCTAT GCCTCTCAGG TGAAAGGACC
 AATGCAAGA GGAAGCAGAG GATTCATGCA CTAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACTGAAGAT
 ATGGTCTATT GAGGGAAAAC TAATTAACAG TTGATCCAAG GAACAAAAGA ATGCTGTAT GTGACATTTT GTTGGGAAAC
 TGACTGTAAT AATAATAAAN CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTTA TGGTTGATAA TTCAAAGGCA
 TAGATGAATT GGGATTCT

SEQ ID NO:1478: (Length of Sequence = 397 Nucleotides)

ACCCTTTCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCAGG CCAGCAAAT
 TTGCCAGTTC AAATTGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCCTGGTATT ACGTTTGTG AAAGGGCAGT
 TCCATGAGTA CCAGGAGAGC ACCATTGGAG CGGCCTTCCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT
 GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCAT GGTACTACAG GGGTGCCCAA GCTNCAATCG

346

TGGGTTTACG ACATTACTAA TCAGGGAAAC CTTTGTCCCG AGCAAAGACA TGGGGTGAAG GGACTACAGC GACAGGC

SEQ ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGAGNGC CGGCTTGC GGTTGASTGG CCGAGCTAA GGGTCCGAG ACCCAAGGGC GGCGACTACG ACGGCGTTGA
TATCGGTGGT AACGACGGCC TCAGCAGGCG GGAAGATGA AAGGCCGNT CGAGCTGGGA GATGTGACAC CACACAATAT
TAANCAGTTG AAAAGATTGA NTCAGGTCAT CTTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGTN CTGGAGGTTG
GCGAGCTAGC AAAACTTGCC TATTTCAATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTG ACAGAATCAG
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTAAAT

SEQ ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTGAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTGATGACC CTGCTCTGCC ATCCCTGTGC
TCCAAGGGCC GGGCCCTGCC GTTGCCTGTG CCAGACGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGCGAGGCC
TGGGCATCAA GGCCCGSATT CTATGGCTGC CAGTTTCATT CTCTCGTGTG TTGTCCCCCT AGCAAGACTT ATGAGGTTCC
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCTT GAACATTCAC TGCACTAGCA CGNCCCGGG ACGCAGNCTT
TGGGAATCAG GCGTCCGCC ATGGTAGAGC GGCTNGCACT GCTCGGCACC GTGACGGACG TTG

SEQ ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGTCTAGAG CTATTCIGTT TTCCCAAGCC ATTTGGCTAG TAGGCCCTAA TTGGTCAGTG GGTTCTGACC CCCCATCCC
TACCTCAGCA GCAGGAAAGG GAAGTGCTGG TCTCCACTG TNCCTACTAA GGCCCGTGG TATCCTGGCA GAAGCCTCTG
CATGTATCTN CGCTCTGAGG ATGGGGGTTT NAAACAAAA TAAGACCCTA CGTCTACTA CCTTGAGCTT GGCTCTAAAA
CCACGGGAAA GGAAGAG

SEQ ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCITTTT TGACTAAATA GTGATTAAGT TATGATATTC CTGTTGGCCT AAGAACAATG
CCTATGATTT AGTTGTGTTA TGTATATTTG TACTTATAAC CAAACAATCG ATTTGGGTACA AGTAGCCTTA GGGCAATACT
TCCTTAAAAA CATGTTTCTG ATAACTAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATGTG AAAAATACCT
CATTTATTTT AAATCCTGTG TTGGGGTAGA GGATTACAGT TGTCAATTCA AATACATGAA TCTCTTGTC AAGNGGTAC
TTTGACAGTT TCATGGGAGG TCAGG

SEQ ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTA CTGTTTAAATAT GCTGAGTACT GTTGATCAA CAACAACTT TAATGGGTGA TGAGCTTTTG CATACCAATA
TGAATTTTNC AGCACTTCTG AAAACTGGCC ATCATTTTNC AAATTCACAA TTGCTGGAT GTCAGGGAAC AATAGGAAGA
AGAATGAGCG TCAATTTTCA TGTCTTCTT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAAA ACAAGCACC
ATCAACCACA CTTCAAAAC AATTCATGTT GGCCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA
GGGACTGCTG GGCATCACTT TCCC

SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCTTAAAG CAGTCTTCC TACAATTGT ATGCAGTAAG TCACTTAAGC ACTTAAGTGT CATATGGGTA CTTACATGGA
ATTAGAGCAC TTCTGAATG GAATTAGAAA AAGGCAAATT GTGCATACTA CTGATGCATT CATTTCTTAC AGAGATATGA
TACCAAGGGC CAATAAGTGA ATAGAAAAAG GGAGGAGGAT TTATTAAATG AATGAGTTCT AACCTGTCT CTTACCAGCC
ATATGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC
ATTAATTATG CATTGCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC

347

SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAATT TCTCACTCTC CTCCCACTTG CTATTGTGAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA
 TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTAG CTTCCTTNC TGCTGGGAGA GTATTCCTTG
 GGCACAGTGC CAAGTGTCTC TAAGAACTA GTCATGCCTG ANCTTAAGGG CTCGCGGATT CTGGGTGGTG GATTTCCTTA
 GGCTTGTCTG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCCATTC ACGCTGAGCA GTCTGCACTN CCTTGGACAG
 ACCCACTGGC ATTT

SEQ ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGTNCTT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT
 TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTGAGACAA GATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCAAGCAT
 GCAG

SEQ ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT
 TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCITCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG
 GCCCTCACTT AACAGGATCT NCTGGGCTT GACCCAGGNC TTTACAACCT CTAGANCCAT GAAAAATTTT TGTTGTTCTT
 AGCAGNCCAA ACAGAATTAG AACCATTAAAT TTCTATTCTT CTTTAGCTT AACACTGG

SEQ ID NO:1488: (Length of Sequence = 343 Nucleotides)

TTGCTAGTTC AGGNTCAATG TCATGGCTGT AACTAATATA GTACATTCGG CAGTTGCAAC GCGAAATGAT CCGCTGGACT
 TGCTGGGCTT GCTGTGCCTC ANCTGGCTGG TTCCAATCTG TGGTGTGGT AACCATGCGG CCCACTGCCT GCCCACCTC
 CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCCGGTGC TGCTCTTTT GCCCAGGTG AAGTGCAGTG GCGCAATCTC
 AGCTCACTGC AACCTCCGCC TNCGGGTTC AAGCAATTNT CCCACCTCA GCCTTNCAG TAGCTGGGAT GACAGGGGCG
 CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTTT TATAACCCAA GANTGCCATT ATTACCCCG GAACCTCAC CAAATAAGTA GGAAACTAC ACTGAGAACA
 ATTGGGCCCA GCTGTCTCTG GCCAATTTCC CTTTCTACCG CCTCTGTGTC ATTCCAGCAA TCTAACTCGA TGAATGATCT
 TCCAGTTGGA AAGATGGGGA CTTCACAATG TGCAGACCCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGTATCCTTC
 GTTCTTTTAA ATGTGCTTGT TTATTTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATAA AATGTATGNT
 TAAATTTTTT GGGGACCATC ATACTGTTTT TCCACAGTGG CTGTACATTT TACAATTCCC ACCAACAATG CACAGGGTTC
 CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCTTCTT TCATTTAAGC CACCCAGTCT ATGGTACTTC GTATGGCAG CCTTAGCAAA CTAATACGGA TTCTCATCA
 GGTTCAGATT TTNCTAAATA AAATGTGTTT GTGAGGGTGG TACAAGCAAC AGTGATATAT TTCTTTAAGT ATTTTCCCCC
 AGCCAAATTC CAACAAGACA ATAATGTCTA ATGCACTGTC TGGTGAATCG GAAAATCTCC TGAATGAAAT AAGAGCCTCT
 AATACCCAAA AGGGAATGAA GTGAGTCATC ACCACAGCCT GTGAATGAAA ATAAGTCTC TGAGGAAAAC ACATGTAAAA
 AATGACACCA TGTGGATTAA ATGGGGGNAC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

348

TTCCTACCA AAACAGTTA CAACAGTTCC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCAATC
 CAACAGCATA CATGANTTGG CTGTGGGTCT GCCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG
 GATTITGGTTA TTCTCTACCT GATCAGAACA AAGGTAACAN TGCCTTACTT TACATTCTTG ACTACCGNTT GGCTGAGGGA
 TTGNTAATA GAATGCCACA NAACAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC
 AGINTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTTCATAA AACATCCTTT ACTATATTTT NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNTTTAATGN
 CTATAAGCAA GNCAGGCAA TAGAATTGTG CTCTTTTTGC AGACTGGGNN CAATGAAATG TTTAGCTACA ATTTNCCCAT
 ACAAACATGA AACAATATTC ATATAGNNTA ANCACCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTTCGACC
 AAAGCAAAAA NTAAACTGAA AATTGTGGG TGGGGTTATT CATATTTTAA ATTCAACATG CTGCTCTAT TTAATAATAC
 C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGCGA GGGGACAGAG CCCAGGGATG GAGGCGGGAT GCGGGGGACA GAGCCAGGG ATGGAGGCGG GATGCGGGGG
 AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAAG GAAGAGAAGG ATTAACAGCG
 TCCACTGCCG CAGATGGGCC AANCNGAGAT GGGACTGGAA ACCAACCCT GCATTTAGCA TCCTGGGGNC TGCTNATAAC
 CTGTGTTTGA TGGCTCTCA AGAAGAGCCA NAACCTTNA AAGTTAGTTC AAGAGAGAAG GGGNGAAGAG AACT

SEQ ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAA GTATCTCTAG ACAGCAAGGA AATAATTCA CGAGATTGCT AAATTGATGT CAACACCTGC
 AGTCTAAAT TTATACAGTT CAATATGTTT CATTGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTGCTGGCC
 AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAAA CATTGTTTAA CGTGGGAGCC TATAAAGATG
 CAAATTCCTG AACACAGTG TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA
 AGATCTNCNG CINTTTACGG GCTTTGTAC CATCGATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG
 CTGCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGTCTAATGA AGAGCTTCGA AACTTGCTTT TGCTGGGCA TGTTGGGATTT GACAGCTCC CTGACCAGCT GGTCAACAAG
 TCTACTTCTC AAGGATTCTG TTTCAACATC CTTTGTTTG GTGAGACAGG CATTGGCAAA TCCAGTTAA TGGACACTTT
 GTTCAACACC AAATTTGAAA GTGACCCAGC TACTCACAAT GAACCAGGTG TTCGGTTAAA AGCCAGAAGT TATGAGCTTC
 AGGAAAGCAA TGTACGGCTG AAGTTAACCA TTGTTGACAC CGTGGGATTT GGAGACCAGN TAAATAAAGA TGACAGCTAT
 AAGCCGNTAG TAGGNTATAT TGATGCCAG TTCGAGGNT ACCT

SEQ ID NO:1496: (Length of Sequence = 370 Nucleotides)

GTCTCTTGA GCAAGGACCC AGTTATTCAT CTTAATTCTC AGGGGAATCT CTGTAGAGAT GAAAAGCAGG AGAACCAAGG
 CAGCCTGGTC TCCTGGGTG ATGAAAAACA GACTAAGAGC AGGGACTTGC CTCCAGCTGA GGAGCTTCCA GAAAAGGAGC
 ATGGGAAGAT ATCGTCCAC CTGAGAGAAG ACATTGCCCA GATTCCTACA TGTGCAGAAG CTGGTGAACA GGAGGGCAGG
 CTACAAAGAA AGCAGAAAAA TNCACAGGA GGGAGGCGGC ACATCTNCCA TGAATNTGGA AAGAGTTTTN CTCAAAGCTC
 AGGCCTTAGT AACACAGGA GNATNCACAC TGGTGAGAAA CCCTACGGAT

SEQ ID NO:1497: (Length of Sequence = 376 Nucleotides)

349

CACACACATA CAAAATCTGT CCATTGCGG GAGNAATNTG TATGTATGTN ASTTGGAGGG TATTAAAAAT CAGTTTTATT
 CCAAAGATTT AAAACTAGAC ATGACTTAAA AACAAATTTCT GGAGCACTGC TTGCTGACAA TCTCGTAGIT CTCTGCTGCA
 TTTGAGTGCA TTTTGTGGCC AGTCCATCAG GCGGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA
 AGGATGTGTG AGGGACCTTG AACCTCAGCT GTATTAACT GTAGCGCCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC
 ANCCTGAATT CTGTGGGTC CNTTCITTTT CCTTTATGTA GGCAGNCTNC AGCATG

SEQ ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TTCTAATCTA ATTINCTAT AGTGTGACTA AAAGGGAGGC AAATTATTGG AACGGATTAT TCAAATGGNT
 CCTTAAATAT TGCTATGTAT AATAAGCCAG TTATTATATC AGGACCATGT TCTCTGTAGG CCACGTITTT NCTCTCTCAT
 TCTCCAGTGG CGGCGGCGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCAGCTT
 GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TCGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTTATCACA CCTGTITTC CAAGGGTCCT GTTACGTACC ATTCACCATT CTGCTTAGCA ATGGCTTGTG AGATGGCATT
 TATTCCTTCA GCATGTATTT TNATGTTTCA CTTCCTCTCA CCTAAATTC TCCCCACCC CAATAACAAT TAGTTGTTCT
 ATTTGCATGT AGCCAGAGCA AAAAAATGATT TCTTTCCCTT AAGTTACTAT TATTATAAAA GGGACGATAA ACACATGAGT
 CATIATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTTGGGCC AGGGCTCAAA
 ATAAGGCAGA TTCAGATTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEQ ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTGAGTAAGN GTTCCAGTC GGTCCCACTG GTCACAAATT TTNTGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT
 CCAATTCAIT GAGCTCCTGC GCGATGGCTG CGATCTGCTC CACGCGGTCC TGGTGCGCTG CCAGGTGCGT CTCGAACGNC
 TCGTGCTTCC GCAGCAGAGC CCGNACCTCT NINAGCGAGC CCGACTCGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC
 ATAAGCCCAA GTCTCGTGCG TTGAGGCCTT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTTCC TGGACCTGTC ACAAGCTTTA TTGTCCCGAG CACAGACTCG CCACACTTCA ACAATTCCAC TGTGGGGAGG
 GGAGGGGTGA ATGAAGGACC TGGGGAGGGG ACATGGCTGA GCCACANCCG GCGGGCCACA CCGGGCGGGC TGAGAGGCC
 ACGGAGGCAG AAGCTCCCAA GGAAACCGCT TCTTGACAC CCGTCACCAG GAGCCACCT CCGGGGGCTC AGNTCCTCCC
 GGCACCTCC TAGATGGACC TCTGGCTGTT AGTAGACTAA TCGGTGCCCC TACCGATGGG GCAGAGCTGC CTGATTTTTC
 CTAGAAAGAG CTGTATTGTA NCCTNGGTTA GGNCACTAAA GCATCGTTCT AGACGGCTGT TAATAGAACT NCAT

SEQ ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCACTTTTC CACAAATCTC CAAATCTCCA GTCTTATCTT
 GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAACCTTT GTTTTCAAAG CATGGGGCCT GAGTGTCTC CACTCCTCCT
 AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCCT CCATCAGAGG GCTCTTCCAG TAGTATTCTC GGATGCAACC
 TCCATTTCTC AGTTACCAIT ATTTCCCTGTA TCAGCTTTGT CCTCCTGNN GGGATGCACA GTGATCCGGG CCACCACTGT
 TGTGTCTG TGCTTCGCT CTTTCCCTATG GTTTCAGNT ATTTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

GNCAACAGGC CAGINTTTAA AGAGGGTCAA GTGGAGGTGC ATATTCCAGA GAATGCTCCC GTAGGTACCT CTGTAATTCA
 GCTCCATGCC ACTGATGCAG ATATAGGCAG TAATGCTGAA ATCCGGTACA TTTTGGTGC CCAGGTGCGC CCTGCAACCA

350

AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANTTTCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTTCAC
AAAGTGNCAG TGCTGGCTAG TGACGG

SEQ ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTGGATGGA TGTTTGATCT GTGTTGGTCA TGAAGTTGTT TTTTTTTTTT TTAAAAAGAA AACCATGATC AACAGCTTT
GCCACGAATT TAAGAGTTTT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGTTA ACTAAAGGTA TTTGAGCTTG
CACTGGATCT TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGTNCA AGATGGGCAT
GAGAAACAGT GAGGTCCCN GCTGGAGGTG GGTGCTAGTC ATGTTGAGCA CTNCTGGCAG GAGAGGTTTT T

SEQ ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCATCATGG CAGAAGGGAA GGGGAGCTAG TGTTGTCAGA AATTGTATGG TGAGAGAGAA GAAACAAGAG AGAGGGAAGG
GAGATAGCAG GCTCTTTTCA ACAACCACT CTCTATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA
CTAGGCCATT AATGAGGGAT TCGCCCTAT GACCCAAATA CCTCCCATTA AGCTCTACCT CCAACACTGG AGATCACACA
TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACCTAG CAACTTGGA CCACCAGAAG CTGGAAGAGG CAAGGAAAGA
TTTTNTCTTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

SEQ ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTTNT
CAGCAAAACC TNGTAACTT TGACGTAAA AGACAAATAT TTTGATCTCT CATTCCCACT CTCAAAAGG TTTCTAGTTC
ATATTGTTTT GCTAAAA

SEQ ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTCCCTCTGT GTGTCAGAGA ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAAGA GAGCCCAAAA
ATAGCCCAAC TGATCATAGC GGTGTAAAA ATATTTCATGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GCTCCTTGAC
TTGTGATTG CTAAPTITGA GAAGCCATCA CTTACACAAC CTGTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA
TGTCATCTAT CTCACCTCC ATCTCTTTTT CAAACTTCGA TAGATGAGAA GAAAATGGTG AAATAAATTT TTTAGAATCA
GTTTTCAGAG ATTGGGTTTC AAGGA

SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATTT CAGCTACTCA GAGTAATGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG
ATGGCTAACA GGTTCINCTG CCAGGAGACA AGTGGCAGAC CCAGGTGTGA AACTTTTACA GGTCCCAACA AGCCTTTCTT
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAAACCAA AATACATACA CCTCCTTTCC
CACCTGCCTC CAGCTTAGTA GCCCATAGTC CTCTTTGTCC CTCACACTGA GCCAGGGCCT GNCCTAGATG ATGAAATGCA
TGGCCT

SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT
CACATTTTAC TGCAATATGT GATTTCTGG TGAGACTCCT TGTCAGAGA TGATTAGCTC ACAGAGCGTT GTAAGCACGT
ACTCGCAACA CCTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT
TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANIT GGNATTATTC TTNCTATTTT GAATGGTATG TACTGTCTGT
GTGTACATA

351

SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTTC TTINCAGGCT GGAGGTGCTC GTATGGTGGG ACAGGAAAGG GGAAAAGAGA AAGGGGCAAC
 ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCAG CCCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC
 AGGCCAGGAA GGAGTTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCAGCCTC AGCTGACACA CACACAAAGG
 AGCGTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTTGCTC CTTTATTAAAC TGINCTTCCT GTAGTGTGTA TTTGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA
 GGNCTGTGTG GGATTGCACC CTGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTTTCTGT TCCCTTGTGC TATAGGAGTT
 AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GTGTATTGTT TACAATAGCT GAAGAATTTT
 AGGCCCATGC TTTATGGGGG AGGGTTTTNC TAGCTAGTAG TCCCTTTCT TTCTAGATTG CAGCATAAGC GTGAACCNCC
 AAGGAATGCC ATATTTTAGA ATCCTGTVAT AGGATGGTTA AGGCTTTTT

SEQ ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAAAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAATTGG TTGAGAACTA CCGTGTGACG
 TAAATGAAGT TTCTATTACA CATGTACTAA CAGAGACTTT TCATTACATA TTCTAGGATA TATTTAAAAT ATATGTATAT
 TTTGATATTA AGGGAATATA TTTTGTGTG CATTTTACAAT GTGTAACACT ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAATATT CTCAGTGTG GAAATATTTT NATATTGCCA AGACCATAAT GTGAGGNGTG CAGCTGCATA ANTCCCTGAG
 AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTTGTGTGGCT GGGCCCAAGG ACAGTCAAAT GTCTGCCTGA
 CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAG GGCAACAAC CTAAGGCTGN
 TATTCTCCAT CTAGCGGTAC TTACCTGGGA ACTGAGTGGC AGTGGACAGG AAGCAGGGCC TGGGCTAGGG AGACCTCAG
 GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCAITCA TATACTCATT CATTGAGCAA ACATGCGCTT GACACCTTCT
 GTTATGCT

SEQ ID NO:1514: (Length of Sequence = 359 Nucleotides)

TINCCAGGC TGGTCTCAA CTCTGGGCT CAAGTATCC GTCCACCTTG GCTTCCCAA GTNCTAGGAT TACAGGCATG
 AGCCACTGIN CTTGGCTAGA AAATNINITT TTAAAAGTNA GGATGTAGAA TTNCTAGCT ATGTAGGCAA GGCAGGAGGA
 GAGGGGCCCA GTTGGGAAGC ATAGCCCACA AGAGTATGAG GGCCTGANCC AGGATGGTGG CAACAGGGAT GGAGAGGAAG
 GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCATT TTNAGCCCAA
 AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCCTG ATGGCAAGAN CTGACCCCTC CATCCTGGAG AAGAGGAGAC CAATTNATA TTATGGAGGC AGAATATACA
 GGACTGTGTG ACTAATTCGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAACTG GTGTAGGTAG
 TGCTGGCCAT TGCTCAGAAC TTTGTGTGAG TTGAGCCCAG GCCTCTGGTT GCAGGACTCG TGAATGGAGC AGTCTGAGA
 ACCACCCCTT TGCTAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAAC AGTGTAGTAT CCGTGTGAGG
 AATAAACGTA TTCATTTAAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

352

TTTTGCCTTA TTCTATCCGA TTTTTCCTT AAGCTTCTAC CTGGNATTIN CCTTTGGAAA AGTCTCTGAG GTTCCACCAA
 AATATGGAAC TINATTTTGG ACACTTTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGNTT
 GCCTAGCCCC ACTCACAGCG CCCACTGTAG CTTCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC
 AAGAAGGTAC GTTCTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCAG
 CTTTNACGCC TTGCTGGCTG ANCTGACGNG ATCTCINTCT GACAACATCA ACCTGCCTCA

SEQ ID NO:1517: (Length of Sequence = 411 Nucleotides)

TGAGCAAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG
 GAGTGGACCT CTGTGTCTC AGTATTACA GTCCCTTCTA GGAAGTAGGT AGCATTCTG AAAATAGAGT GAAGCAATTG
 ACTGATGGAT TTAATCTTTA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAAGTAG GTGCTATTTT
 NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC
 TTGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACTGGTAA TTAATTTCTT CTAAGGAATT NACCGTTCTC
 ATAGTGTGTT T

SEQ ID NO:1518: (Length of Sequence = 388 Nucleotides)

GGTGGGCAGC TTCTCTCTGC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTTNAT GGGCCTCAGG GGAGGAAGTG
 TGTGCNAAAT GGTCCGTGGG CAAACATGGG CGGGCCTGGA AAAGGCACCA CAAGTTCCCA CCCCAGTCAG TAGGATCAGC
 AGTCTGACAC CCAGGCTTCA GGGCCTCCCC GACTTGAAGG TGGTGCTTCA CCAAGGACTC ACCCACTCCT GCCCAGGAGC
 TTGINTGCCCT CCGTCTGCCA TTATGTTGTC CCAGGCTGTT TGINCCAAGG AGTGTCTGTG GGCCAGCCTT GAGCTGCCCT
 CAGCACCCCC TTGGCCTCTT TTCTGINTCT ATTGGTGGCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

SEQ ID NO:1519: (Length of Sequence = 358 Nucleotides)

TTGGTTAAGA CCAAAGTCAG ATCACTCCCT CCTAGCTCCA AACCTGCAGT GGCTCCCAAT TCTNTCAGCA TACAAACCCA
 GATCCTCAGG CTGCCATTIN TGGGCTGAAT CCGTCCCTG CTGTCTGATC CCACCAGACA TAATGGAGGC CTGAGGTTCC
 CTGAACACTC CTAGTTTAGC CTTAAGTTAA GTATTTGCAC ATGCTGGTTC CTATGCCGTA GATAATGTTT CACATTINAT
 CCCATTGCTT GCCAGAAATA GAAACCTTC CACATAATIN CAAAACAGAG TTTACANCAC AGAGCTTTGG GTGACTGCAG
 GCCTCCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

SEQ ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGTAA ATATGCCAG GCTGAAAGAA GGTGTATAAT GTATGNCCT NCTTATACCA AATGATTCTT TTGGAATTTA
 AACAAATATG TTTAGTATIT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGINTT GACATTGTAC ACAGATGAGT
 AGCAGTAACT TTTTATTTAG TAAGCCCAT AGGATAGTAN GGNATAAAAG TTGTTAGTGA GCAAAACAGG AGTATCCTGC
 CATTGTCTTT AATTCTNCTT GTGATAGTTT TGAGGGTACA ATAATTCTG TGTGCGTGTG ACTCAAGCAA ACCAGAAAGT
 GTCCTTTTGA AATACGCATT TTGGGCTCA TCCTCATGGA GGTTCCGTT GTTTGTTGG

SEQ ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTTGGG TTGACTCAG ACTCAGGAGG TGAATCAAGC CTCAAGCTCA GAAGCCCTCT GINACCATCT
 GTTGAATCAG AAGCATGCCC ACCATCCAT CGAGTGCCTT TCCAGGCACT GTCTGTAGC AGACGGAGTT CAGGCTTTGG
 AAGTAGACAC ACCTGGGTTC AAATCACAGC TCCGCTTCTT CCGCTGAGG CTCCATAACC TAGGATAAAG TCGCTAAGCC
 TNCCTAAGTC TCAGATTCTT TACCTCTAAG GTGAANGGAT TGGATTCCAC TTTACTTCCC CCCTTTTCCC TTTANGGACT
 CTGCATCCTC NITGCTTG

353

SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GTGAATTTCA AGCAATTGTT AATGGGGACC AACAGGGCTG CATTAAGAAA ACCACTTTNN ACTGATCTCT CCCCCACATA
 TTTTAAATTT GTCCTGCTTT GTTTATTTTG GTTATGCAAG TCCTTTCTCT TCATGAAACA AGTGTAAAGG TCTAAGGCTA
 AAATAATAGT TATTTTGTG GGGCCCAAAT AGCTACTTTT GAATTTCTTT CTTTAGTATA TCTCAAATCT GGGGAACATG
 GAACTTGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATTC ACTTTTCACA GAACCATTTT CTTAAAAATA
 AGGGGGCAAT ATCCAGATTC ACATGCATGT TCATAAATAA AGCTTTGGTT TTAAAACAAA TCCACACCAG CAATTATTTT
 CAGCT

SEQ ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNTCACAGA ACTCCAATTC TTTATTAAATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGNGTAAA
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACNCITCA AAACCTGCGAT AGGTACTTAT GGTGGGIATC
 TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAACCTGGT CACTTTCACA GATGGNGTGT TTTGTTGTTG
 GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGAAGAA AGAC

SEQ ID NO:1524: (Length of Sequence = 299 Nucleotides)

GTGCTTGATC GTGACAGTTT TGTCGATCA CATTTAGGA AGATGATGCT GTCTTNCIT CTTAAGTATT TATTTINATC
 AGTCAAGTGA TAGGAAGTTC AATTTCAAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTTAT TTNAGATGGA
 GTCTTGCTCT GTTGCCCAAG CTGGAGTGCA GTGGTGTGAT CTCAGCTCAC TGCAACTTCC TCCTCCTGGG TTCAAGCAAT
 TCCNCTGCCT CAGACTCCCG AGTAGCTGGA ATTTACAGGC ACCCACC GGG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

CCCCATGAAG CAGCTCTCGT GGATGGAGT CTCATGCCCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCTTACA
 GTGCTGGTGT CTGGGCAGTG GCCTCACTCC CATGGCTCCA GGAGGCATTG CCTGGTGAG GGATCTCTGT GGTGGCTCTG
 TCCCTGTNAC AAGTTTCTGC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAATCTAA TTGGAGGCTG GCATGACCCC
 ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGCACCAT GTGGACACTG CCAAGACCTA CCTACCACTT GTGCTCTCTG
 GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCTTGA GGGTGGCC

SEQ ID NO:1526: (Length of Sequence = 318 Nucleotides)

GTCTCTCTCT ACTGCACCAT GATGCCITTA AAAAGAATCT AGGGGCTGGG CACAGTGGCT CACGCCTNTA ACCCAGCACT
 TTGGGAGGAG TTCACTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCGGINTCCA CTAAAAATGA
 AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGGAAG TTGAAGCAGG AGGNTCACTT
 GAGCCACAGAA GGTCAAGGCT GTAGTGAGCC ATGATTNTGC CACTGCATTC CAGCCTGGGC AACACAGTNA GACCCTGT

SEQ ID NO:1527: (Length of Sequence = 313 Nucleotides)

TTGGCTAGAA GGGAGGCTGG AGCCTTTCAT GTTGGCTTTT GAATGCCATG GTGAATAGTT TGTCTTTTAT TTGTNATIGA
 ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAAATGA TTAAGCCTGT GGTTTAGGAA GAAAGAGCCT ATTAGGGAGA
 TAAATCTTTC CTTAGTTGTA GGAAGGGTTG GAACAGTATG ATATGGAGAG GGTAGTAATG AATGANGGAA TNGAAAACGA
 GAATAATTTT AATGATACTG GAGGTGCACT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEQ ID NO:1528: (Length of Sequence = 405 Nucleotides)

GGCGTCGCTA CCGCCACCGC CACCGCCACC GCCGCCGAGT GCTGTCTCTA TGGCGAGGAG GAGGAGGAGG AGCGCGAGTC
 AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

354

ATCTAGACTC CCTTGTGCCC TCACTATGCC AGCGGAAGTG TAGATCATAG CCAAAGAATT TGGAAGTTT GGGCTTGCAA
 CTTGGATGAA GAGATGAAGA AAATTOGTCA AGTTATCCGA AAATATAATT ACGTTGCTAT GGACACCGAG TTTCCAGGTG
 TGGTTGCAAG ACCCATTTGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTC GGTGTAATGT AGACTTGTTA
 AAGAT

SEQ ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTTCTTGC CTCCATAATT CAGACAGTAA ACTGATCGCT GAGATTGAAG TTTGCTTGTT TCCTGGGGAA
 GCTTNAAGAT CCTCGTGGGA CCACCATCCC CTGCTCAGTC CTCCCTGGAA GGGGGCACTG GCTGGGTATG AGCCGCGTCA
 CCGTTGGGTT TGTAACCTTN TGGATGGTGC CTGNTTTTCA CCTGGGGCTG GCTGAGGAAA GGGGAGGCGG TAGNGTCTG
 C

SEQ ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTTCC CATGCCGTGA AGTGTGTTTG TAATCCACA TGTATCAGGT GCCTGGCTGC TCTGGGACTT
 GCASTAATTG TCTCTTGTTT GTTTCAGGTG TGATCCCCTG GGCCCGTTTG TTGTCGGGGG AGAAGACTTA GACCCCTTTG
 GGTGAGTACT GCTGGGGAGG TGGCAGCAAC ACAACTTGCT TTNITGGCTT TINAGCCCCA GCTCATCTTC TAATTINAGA
 GTTTTCGGTC AGTCTCTTCC TTTGGNGTN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT
 GGCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

SEQ ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CTGCTACGTT TCCTTCAAAA TTGTTAAACA TCCTTGCGG AAGAAGCTGC TTAGTTATAT CCAGCGATTG
 GTTCAAATCC ACGTTGATAC AATGAAGGGT GGGGTATCTA GCAGGATGTC TAGTTCACGC ACTGGGTGAA AAACAACCAG
 AGCTGCAGAT AAGTGAACGA GATGTTCTCT GTGTTGAGAT TGCTGGACTT TGTCATGATC TGGGTGATGG GCCATTTTCT
 CACATGTTTG ATGGACGATT TTATTCCACT TGCTCGCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GTTATGATGT
 TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGAACAATA TGGGTCTCA

SEQ ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTTG AGCCACCAAG AAGTGGACTC TGCTAGGAA GACAGTTTGC TGAAGTTAGA AAGTACTGGT CTAGGAACCA
 GAAAACCTGA TTCINCCAA GAGTTAGAAT TGINAGTNAG TTCTNCTGG TTTINAGTTT CTTATCTGT AAAATAATTA
 CCCAGTTCAA TTGGATAATC TCTATGATCC CTCCACATT CTGCATACTT GGATATCTAC TGTCTCTAAA TATTTTGGCA
 TTTCTTATAA AGCCCTTTCA CATTNCTTT ATTATTTTTC CCTCACAGA ATTCTGAAA TAGGATA

SEQ ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGGCTTTAT TTGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TTACATATC AGTGACCAAA TGCAAACATA
 CCCGTACTAA CAGTGCTTTG GTCCATGACA TACCCCTTTG ACAGCCCAA GCTGAAACGT CAACTCTATC TGGGGTTACT
 TGCTTATACA AAGATGTTAC TCTAGCAATT GTTGCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA
 AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTTCTTAAC
 AAAGGTGGGT AAGANTC

SEQ ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGGCATGT GGGTACTACG TTAAATATT TAATTATTTT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGATT
 GATGCTCTGA ATAACCTTAT GAGTGAATAG ATACTGAAAT TTGAAGTCAG TGTTTTGCAC AACAAATCAA GATTTGGGAC
 TGGACTTACT GGGTTGGGGA CTCTTAGGG ATAACGGTGG TGCTATGAGC ATGCTGAAA GATGAGAAGC AAAAGCCTGG

355

AATTGGGAGT CCTGTACTGT CTTTAGGGTA TGCAAAGAGG CTCCTTCITT TCTAGGTGTT CATCAGTACA ATATGAC

SEQ ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTAAAGATG GAGTAGGACT TINCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG
AAATACCAT TGTAAAGGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG
TAAGGCTTGG GCACTNTGGA GCCCATGAAG GTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTATNAAG CCATAACCA
AAT

SEQ ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATTT TTAGTCATC TNCCTCAAGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA
CAGTTTTTC CCTTCCCCGT CATGTACATT ATTTATTTT GATCCTACTC ACTGTCCAA GTCCAGAGGC AGTTACAAA
AACACTCTTG ATGCAAACCG TGAGTGGCTA CAACACACCG ATGGGGGTGG GCGCGATTCC CACAACAGGG AGTGGAAATCC
GGGAAGATG ATATATAGGG GCAAGACGGC CCTTACTTT GCTAAGAGTA TATGGGAGCT CAAA

SEQ ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGCGCGGCG GACTGAAGCG CGCGAAAAGC TGAGGCGGCA ACGTCGGGGA CGGCTGCNOG GGACGGCTCT
GTAGGAAGGA ACTTGGTTCC CCTTCCCTCA GCTTCCGCCC CAAAAGATTG AGAATGGACA GTTTAGAAGA ACCTCAGAAA
AAAGTCTTTA AGGCTCGAAA AACGATGAGA GTNAGTNATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT
NTTGAAAAC TGAATGCAAG CTGTTAAATN GCAACCATG

SEQ ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTTCTT CTGCTCTGAC TCGGAAGAA CTGCACTGT TGCTAGGCT GATAATCCCC GAAAAAAGT AACAAATGCA
ATTINTACCC CCACCCCAT ATACAGCCCT CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGTCTTC
TAGGGAAGAA AAATCTAAC TTCCCTAGCC ACTGTAGTCA TTGAAACCT GAGTTAGACT ATGAGTTAGG AAGTATTTTC
ATAGAGTCA ATTAATATAT TTCTGCTCTA TGCAATGATG CTAACAGGTT TAAGGAAACA CAAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATTTTAC TTTGTAATCG AGTAATTTAG CCACACTCTT GTGAGGGAAC AAGCCAGAGC CAGGACCGCA TATTACCGG
TAAAGCTGCA GAGAAGACTT GAGACTTGTA AGATTGNNCC NGGCTGCACT CCGTGGTCA GTAACATCTG CAACATTATA
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAATGTC TTCACACATT GCACCACTGA TTCTTTTCCC TGINTCTCTC
CTTCTCTGGG GAAGCTGCCC TTNAACA

SEQ ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTTATTCAG ATGAAAAAA ATCAAGGCTT AATTTAAGTA ACTTGTCCAA GGTCAAGGAG TTGACAAGTG GCTGAGCTGG
AGTTCAGCAT CTCAGACATC TTCTTTGAA TCCTTGCCCTT CCTTGTGAAT TTCAGATGAC GGAGCATGAC GGTGTCATGA
TTATGGGGTC ACCGGGCCTG TCCTGGGCCT GAGGGACCAA GGATCAGAAA GGGCAAGAAC CAACTCGNTC AGCTAGTGAA
AGTCAATTG GACANTGATC CTGTTCCGG GNTTAACCTT CCGCTTGGCC TTTAAGAGGG NTTCTTGAAA TGCACCAAGG
GGCCTTAGAG GAAGCAAGCA AACINCTTGG ACCT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

356

GIGATGTTAT ATCAGGTAAA ACCTGTCTAA GGAGAATAGA CAGTAGTTAG TTCAACTTAC TCATTACGTA TTAGGAAGAT
 TAACCTGGTT ATCATTGTTT TATACATATA TATATGNAAT ATATAAGAGT ATTGCTATAA ATATAATACT TTTACCTTGT
 TTATGTATTT ACTCAATATT CTCCTTTTCC TCTAAAATAA TCTGAAGTGA CTATTATCAA TAAGTTTACT ATGCCAAAAT
 TCATTAAATG CCTTTCACCT AACCTTTGGG GCCATAATAA ATAATAAAT GTATTGCCAT AACATTAATA AACTACCTTA
 CAAAACCACC AATTAAATC AAACAACCA AAAGGTGTTA TTTACATCTG NNCACATAAA TCTACTAAAA ATACAGGTT
 CAT

SEQ ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTTTATAAA AACATGTCAC GCGCGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGCCGAG
 GCGGCGGNT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAAACGGT GAAACCCGTC TCTACTAAAA ATACAAAAA
 TTAGCCGGGC GTGGTGGTGG GCGCTGTAG TCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCNGAAGG
 CGGAGTTTC AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG
 GNAGTACAAT CCT

SEQ ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCCTGATAA ACCTATCAGA TTCTGTGAGA CTTATTCAAT GTCAATAGA ATAGCAGGGG AAAGACTGGC CCCCATGATT
 CAATTACCTC CCCCTGCATC CTTCCACAA CATGTGGGAA TTGTGGGAGA TACAATTCAA GTTGAAATTT GGGAGCGGC
 ACAGCTGAAC CATATCAGTC TGTATTATCT CTCNTTTTT CTGCTTTAAG NGAATATACG NAGGTGTTGT TTTACGGNT
 TATACATAGG TATTCTGAAA GATGGGGTTA TTTCTGTTT CANACTTTGA CTAAGTGGCT TCTTTGTCC CCTATGTGCC
 AGAATAGCC

SEQ ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG
 GAGCTCGGC AGGCTTCGCA AGGCATGGT GGTCACTGG CGGCACGGCG GCGGCTGGC GTGGTCTGG AGATGATCCG
 GGAAGGGAAG ATTGCGGTC GGGCAGTCCT TATTCTGGC CAGCCGGCA CGGGGAAGAC GGCCATCGCC ATGGCATGG
 CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTNA AATCTCTCCC TGGAGATGAG CAA

SEQ ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAACCT GGAGCTAAGA ACTTCATCTC ACTTTTGACA CCCAGCCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG
 AATTATAGC AGAGGCTTAA AGAGAAAGTT ATGATTTGTT TAAAGTAGAG AATAAGGTGA AAAATAAAC CTGGTACTCT
 GTCGTGAAGT CTTGGAAGTC TCCTTGCCCA ACCTCAACTG GCCTGTGGGC TCCTGINTCC TTGCTCTGGG ATGCCATGGT
 GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCINTCGG TTGCAAGGCG AGTCTTTTGC TGAGCCAGC
 CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAATN CTGGGGACAT GTGTTGAGG TTTA

SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAG TGAAAATNCT CTCAGTTTT TTTAATTGGT TCAGCAATTG ATTAATTACT GAATCTTGAC
 CCTAAACTTT TTAGTCTAGA AATGTGCTTG AGGAATACAG GCTGGAGATC AGCTTTTGA CATTGCATTC CCTCCTGGN
 TCACATCCAT GTTGAATCA ATTTATAAC TGCCCTCCTA AGGCTTAAAA TGATGGTGAT CTACAGACAA GTGCCCTCT
 AGGCACAGGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTTAAAGGGA AACTGAACT CATGGCAGAA ATGGTGGAAA
 GTAGAGAAAT GAATAGAGG GGGAA

SEQ ID NO:1547: (Length of Sequence = 342 Nucleotides)

357

GGAGGCTGAG GTGGGAGGNT CACTTGAGCC TGGGAGGTTG AGGCTGCACT GAGCTGTGAC TGCACCACTA TACTACAGCC
 TGGGAGACAG AGTGAGACCC TGTCTCATAT ATATATATAT ATATGTATGT ATATATATGT ATGTATATAT ATCTCTAATA
 TATTAAATA TATCTAATAA ATGTATCTTA TATATAATAA ATATATCTAA TATATAATAT ATATATTNCC NAGAGAGGGA
 GAGGCTCTTA GGAAATTATC TTCTTGCAATA TTATGTTATA TTATGCTATA TTTGGCTATT TCCTAAGAGC TCTATCGTAT
 TATTTCCATT TATTTGTGAG GA

SEQ ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCOGGGT
 CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA
 TAGGTTATCC TTGGAGAGTA TCCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
 AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNAIGATAAT CTGAATTTTC AGGGCTAGGC
 TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC
 AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGTNTG GCAGGACAAG GGCCCTGCCG TACATGCTAT GCATGAAGGA
 AAATCTTGAG ACTAAGACTC ATGAAAAGNT CCAAATAAT TATTTCTGTG GGGCCCTAGA AGACTNAAGA GACATTINCT
 TCGCCATTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT
 GAACACATGC TTCCCGGAGC TCGTCINCAC AGCATCTTCA CC

SEQ ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAAGAGG TTTGTACAG CAAAGAAAC TGTC AACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA
 TTCACAACT ATGCACCCAA CAAAGCTCTA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAAA
 CAACCCATT AAAAGTGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA
 AAAATGCTTG ATATCATTA TATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTTT CTTCTGTCTA GGNTAATTTA
 TTTTAGGG

SEQ ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA CCTACCTATG GCAGCTCTCG CCGTCGGGAT TACTATGACA GAGGATATGA TCGGGGCTAT
 GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA
 TCAGATTTAT AGAAGGCGGT CACCTTCTCC TTAATATAGT CGTGGAGGAT ACAGATCAGG TTCCAGATCT CGATCATACT
 CACCTCGTGG CTATTAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTTN
 ATTGCTCTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEQ ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTTACTGA AATAGCAAAA ACGTGGACTT TGGGATTTCC TCTAACTGCT GCAAATTATA ACACAGAATT
 GCTCAGTGTT AATACTTGAN TTGTGGGGCC AAGTCTTCTG GCTGCCCTAG TTCTCTTTTC TGGCATTTGA AAGCCCTTGA
 GCTAGCTATG GAGCTAATCT TTGGACAGGC TTTTGTGTTT CCAGGAATGT CATGCCCTTG AATTTCGAAT CTATATATAT
 ACAGTGTGTG TGTATGTATA NCTGTCTTTT CACTGTAAAG CACCTNCACC CATCCCTTAT AGAAGNGGC CACAAACAAT
 CAAGCAAATG

SEQ ID NO:1553: (Length of Sequence = 304 Nucleotides)

358

CCCTTGTCAC ACAGCCATTT AAAAATCTTC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTTAAAAAG
GAAATGCAAG AGTAGGNTAC TCCAATTCCA GAGTCTTTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG
GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC
ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TGTGTTACTG ACCATGTTTT TGAGAGTAGT GCCCCTAACC ACTTTGTCTC CACTTCATA GTGTAGTGAT TTNAGGNCT
CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TTTTATCCCA TAATCAAGCC AATTCTTCCA GAATATTACC
ATCAGTATTA CCACATACAT CCTCCCAAAT CTTATTTCOA AGAATAAATA TATAGTCACT CATGGTTTTT AAGNAAACCC
AAAACACTC AACCAAAACC TTGAGGAAGG TTTTCCAGG GNTTCTACC TTAATTATTC ATAATGATT

SEQ ID NO:1555: (Length of Sequence = 326 Nucleotides)

GTTTAAAAAC TGTCCAAATG TCATTTTAAT TTATGAAGGC ACCCAGAATA AGTNCATAAT TCATACTGCC CCAATATATT
TNCIGAAGCC AATTCTCTCT TTTATTAATT TTTACTGAAA ATAGCACTTT TTTCTCCCC CTGATAGTAC TGGGTAATGT
TAGAATGTCC TCTAAATTC TTTGGACCTT ATTTACATTC TCAAGAGNTT TTTTAAATT TACCAATAAG ATGTGCTATT
TGAGGAATTA GACTTTAGTT CAGTTGTACA TGGNTATGT CTGCTCATAT CATTCATGTC TGAGNCTTTC ATTTTATTAA
TATGGG

SEQ ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TTTAGGTGCT TTGTCTCCT TGAGGAGCCT CCAATGCTGC TGCTCCTATA CATGTCACAA TTTCAGACCC
AGCATGCTAG GAACTGCTGC CAGCGCCTGG TTAAGCCAACT ACTAAATGGG GCCAAACAGG TGAACAGACA TTCTGTCTTT
CTCCAAACCT CTGAAAAAGA TTCTGCACT CATCTCACAG TAATTTGTTC CCTAATTAC TCTTAGGAAA TTGTCTTAA
AGTCTGATTA GGTAAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTTATTTT
CTTTCTATA GCTCCAGCAT CAGTAATTGT ACCATTATTT TTGGCAGCTC TGGGG

SEQ ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCCGAAG ACTATTCCTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA
AAACGGTGGG ATTAACTAG TGGAACAAG GCTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC
TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCCCTG AAGGACCATG TTCCCATGAG TGACACCCCT
CTGTAAATGT GGTGGCAGAT TATGGGCTGC TGTTTTAGAA GGGACTGACA ACTTGCTGGG GGTAT

SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCCCCCT TTCCAAATGT ATTTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCCTC TAACCCAGGG
TTGCCCCATT CACCTTAAAA CATTTTTCOA TAACCCAGAA AAAACCAGG TGAACATACC CAAGCTCCGG AACCCAGAAA
TNTTGTTCGA ACCCCGCTGA TGACTCCAG GGGAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG
NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

SEQ ID NO:1559: (Length of Sequence = 246 Nucleotides)

GTGGTCCGTT CTCAGCCCAA CAAGAGTGAT CCTTTTAAGG TCCACACAG CTGCTCTCC TTCTCCGCA TGAGCTCTG
GCATGGTCTT TCCTCCAGCT GGGCCGGGC TGGGCAGAGC CTCCTCTGC CGGGGCCCTT GCCACCCCTT TCCTTTGCTT
GGAGTNAGGG TGTTCATACC AAAGACGGAA CCAATTTCGCC TTTAAAGAAA ATATATNCAG AAGCAGCCGC TGCTCGNAG
CCCTGG

359

SEQ ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGTAC AACAGATTTA CTACATTAA GACAGGAATC TTTTCTAATC TCTGTCCTA TTAAAGAAGC CACCTGCTTA
GAAGTACTTT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG
TTTCATTAC CACTATTCTT TAAAGTNCCT TTTGATTTTA TGTTTTAAAT TTTTAAATTT TATATTTTGA GACAAGGTCT
TGCTCTGTG CCCAGGCTGC GGGGCGATGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC
CCATCTTAGN CTCCTGAGCA AACTGGGNC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEQ ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCTGT GCCCCCGTCC CCACCACCAC CTTCCCAAC CACTTACAAC TGCCCCAAGT CCCCACCTCC
AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGCA AGGTGTCCCC CGCCACCAGG TCCGACACCG
TGGCCACCAT GATGAGGGAG AAGGGGATGT ACTTCAGGAG AGAGCTGGAC CGTACTCTCT TGGACTCTGA AGANCTCTAC
AGTCGGAATT NCGGCCGAA GNCACCTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEQ ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCG CGAACGCGAG TATCATGCTG GCCAAGAAGA TCATCATTAA GGACGGAGGC ACGCCTCAAG GAATAGGTTT
TCCTAGTGT TATCAGCGAG TTATCGTCAT CTTTTTGGAG TTTTTTGCTT GGGGACTATT GACAGCAGCC ACCTTGGTGG
TATTACATGA AACCTTCTCT AACATACAG TGTGTAACAG TTCTAATACA GCAAATTTAA TACAATTTT TATTAGATCA
AAATTCATA GAATGTTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTCACCTGC CGTNAAGTAT TTCACATTC TATAGTTTTT TGTGATTCCTG CCTGCATTTA
ATCATCATCA CCAACAAAA TAGTTCCTCT GAAGAATTAT TTATACTAG GATTCTCAGG NTATCTCTC TCAATCTCTA
TTGGGATCAC TCCACTCTGA CTGTGACACT CATTTTCCCA CTGATGTAGC TGTTCTCAAG TTAGAAGTGA AGTTCTCAGT
CTTCATTTTA TCAGTCATCT CAGCAGCAAT CATTTAGGTT CAGGCACTCC CTCCTATT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGNTC AGTTCATACT CTGGCAGTTA ATTTTATTTT CTCTAAATAA AAATGGACAG GTTAATTTAT TAAGCAGCTG
TGTTATCAAT ATGGTACGTG TGTGINCTTG TATAGATAGA TGTATATGTA CATACTAAC TATACATTTT NCTGGACACA
TAAATTTTNA GGTGCTTATT GTATGCTAGA CACTGTTCTA CCATCAGTAA AAAAGCACTG CCCTGTTTTA CTGTTGATTA
AAAACAAAAT TCTGAAAATA GTGANCAATG AGGCTTACAA CATTTGTTAC AGGNTAAGN ATCTCAATTT AGGAAAATGT
TGTC

SEQ ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTTA TATTAGTGCC TGCTTTTAA AAGTTATTT TACATTTTAA ATACAGTATT TTTCTCATAA AAAAAAATC
CAGGAAGTGC CTAACCTCCAT GGTTCCTATA CCATATGTAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGTA
ACAGTATGAA CACCTATGAG CTGGGACTAC TTCTGANTCA AAATTAAAA ACACAAATTA AGCACTGCTT AAGAAAAAAA
AAATCCAGTT TCTGAACAAC CAAAGAGAA CAGAGTTAGA TATGTACAA ACCAGGTATT AAAAANCAGN AAGGAATACA
GCACAAAAA ACTCAACAN CCCATATGTA GTGAAGTGT TATACTGCAG TTAATGAAAA CC

SEQ ID NO:1566: (Length of Sequence = 305 Nucleotides)

360

GCACTGTGGC TAATTGTAGC TCAAAAGATC TGCAGAGCTC CCAGGSCGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC
CCAGTGAGGG GTATACCTCA NTTACCATGT GCCAAAGCAT TATACAATA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT
CAGCAAAGGT GACATCATCA TTTTNGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGGA AGTCAATGGA ATCCATGGCT
TTTTTCCCCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCCC ANCTCAGTGC AAAGC

SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTTCCCTG GGAAGACAA CATCACCAGC AAATGGATGA TTGTCAACTG GGGAGCCATT GACTCTCCAC TTGATTGTGG
GTTGAGGTTT TNCITCAGCC TCACATAACA AGATGCCATT GCTTCCGGTG CTATACACAG CACTCTGAGG CTCTTTTGTG
CAGCGAGGAG GCTCTTCTAC TATAACGTGA AAATCGTGAG TGGCTGTTC CAAGAAATTG CTGGCTGTGC AGCGATAATT
TCCTTTGTCC TGGTAGGAGA CATNCTCTAT CTCAAAGTC TTGCCATAAT TT

SEQ ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTGAACCC AGGAAGCGGA GGTGCACTG AGCGAGGTC ATGCCACTGC
ACTCCAGCAT GGGCAATAGA GCGNACTCT NTCCCCCGG AAAAAAGAA CAAGGGCTAA NTTCAATCA AATTTTCCCT
GTACCCTAAG AANAATAATT AGGNCGGGAG ATGTTTGACT AAGT

SEQ ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAACAC TAACAGGAAC AACTCGTATT
TCCATTAAATC AAGATTTTAG TATACCAAT TTCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTGTATG
CTACTGAAGG GNAACATCA TCATACAGCA ATGAATACTT CAAGGNCIT GTTGATCTCT CTATTATTGA CAGTGGGGTG
TTAAAGTCTC CCACTATTAT TGTGTGGNG GCTACANNC TTTGTAGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGG
TCCTCTTTGG GNGCATATAT AATTTAGGT AGTTAGTTCT CC

SEQ ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGTT GTAGTTACTG CGTAACITTA TTTATGAGGC ATTTTAGAAT AGGCAAACT
GATCINTTGT GGTAGAAGTA AGAAGTGGG TACCTCTGG AGGAAGAGAA TTINCITTTGA AGTGGCATGA GAGGATTTT
TTGGCTAATG AAATTATTTT NATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TNCAAAACAT CATGGNACCA
TTCATCCAAG TCCTGTGCAT TT

SEQ ID NO:1571: (Length of Sequence = 402 Nucleotides)

TGCTAAATGA TAGAAGACAG ATTCAAAGTT GTAGTTACTG CGTAACITTA TTTATGAGGC ATTTTAGAAT AGGCAAACT
GATCTGTTGT GGTAGAAGTA AGAAGTGGG TACCCNCTGG AGGAAGAGAA TTINCITTTGA AGTGGCATGA GAGGATTTGT
TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGTTGTG GGTACACAG TTTAGGCATT TGTCAAACT CATGGAACCA
TTCATCCAAG TCCTGTGCAT TTTACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GAAAAAATA CTTAATTATA
ATATAGCATT TATGNATTAA AATAATCCCN TTATGTAAAA ATATTTTATT GNTTGGTCA AGATTCATGA TTGCAACCA
CC

SEQ ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGGCC AACCGCAACA GCATGGTGAG CAGAGGCATG
ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGTN TTCCAGTATC CAGGAGCAGG
AATGTTCCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCCGATGCCA ATCCCTCCTC
CTCAGAGTTC TCTTCTCCAG CAACTCCAC CTGCCTCCGG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC

361

GATAGGAAAC AACAAATGTGT TCAGTCAAGC TGTCCAGAAC CAGNCCACGG CTGCACAGCC AGGNGTATAC AACAAACATGA
GCATCACCGT TTTCAT

SEQ ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAATAAGTT AGAAACATGA AAAATTCTTA GAACTTTAGA TGAAAAATTA AATTTACTAC TAATACCCAC CTGCAATAAT
TTCCCGTAGT TTGGGATCTA GGTTTACAGT GCATGGCAAA AAGACTTTTA CATCTGAGC CACAAGAACT GGGGTCTTG
AAGACAAAA CACTTCAAAA TTCTTATAT CTCCATCAAT TTCAAGAAGT GGCTCAACAT CCTTAGTTGT TGGAAATATC
TTTGATATTC TTTCGTAGAT GGTTTTTAAT GTCATTTGAT CTGGAATACC TTCAGTCTCT TCCAAATATA ATATGAGNCA
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GTTGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTTTAAGC AAATGTTATG TTTAAAGACT GTTTTGATGA AAACITTTAG AATTGAGTTA GTAGCAGAAT ACATAGCTAA
ATGTACTTIN CTACAAATAG AATGAGATAT TTGATTTAAA ATATINCTTT CCTCTTGAAA TAGGATGTTA GATAGGGACA
TCTCATTTTA CCTATCAAGT TCTGAGTCTT GCTTTAGAAC TACTTCTTTT AACTTAATIN CATGCATACA CTGGAAGACA
ATAATATGGC TTTTAACTG CATTATCTTT AGTTGAAACT GATGGAGAAA CAAAATACT GCTTATACCA TATTGGGTAC
ATGCTGAATG TTTTAAAGA CTAGCCAAAA CTGACATTTT TTAATAATTAA ATAAGATGTT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TTCGCGGCA TCTGCATGAT GATCGGTGTC AACCCGGGGG GCGTTGTGCA GGTGGGGCA GCTGGGCTCT
NAGGGCAGGC GCGGGCNCCTG GGCTCGGGCG GCCCCTCACC TGGGATCCGT CACGTTTCAG GACTTTATTT TCTTCTTCAA
TGNIGTAGCC TCCTGGGTGA GCCCGAAGAT NACCTTCGGG ACATGTTTTA TAAGGTGAGG CTCGTCTGG GCCCTGATCT
AGTTCGGGA GCAGGCAGGA NGTGAGACCA TCTGGTAACA ATNGGGGCTN GGGATT

SEQ ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTTATGAAG TAGTAATTCC TGAGAGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCTGGNT
TTAGACATGC AGGGGTTAAT CAAAATAATT TAGGAGCGTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCCGTGG
CGAGAAGAAA ACCGGTGTIT AGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC
TNTTTCGAGG ACGGAACCCG CAGCCTNGCT GINTCCAGC AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTCC CGCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCTATTT AGTCATAATG
CCTCCCCACC AGGTCTAGCT TTCATTCATC CATGAACCT CACCAAGGG CCAAGAACTG AGTTCAGTGC ACCCTGGACC
CCTGTTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTTT CTCTCCTAAT TTINTTGCAT CCCCTCAGTG CCCAGCACAG
CTCCGGATAC AGGCGAGGTT CACAGTCAGC GTGTTACCT GGGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCTT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGTTAGAG CCATACCAGA GAAAATCACA AGAAAGGCAG GACTGCAAAG NTCTAGTGA GGTGTGAGA
AAAGGTAAAC CCCTTCTTAA GCTCATCTGC CCCTTAGTT ACCACTGGCT GTCTCACTCC TGGATTTATG TGACTCCCTT
AGCTATACTT TCCCANCCCC CTGGGATGTT CCCCACTCAT CCTATTCAT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)

362

TTGGTCCTCA AGTCCTATTT TAAATTTTG TCAATTAGAG GACTCTTGGT TCTCTTGSIT GACTCATTCT CTGCTGATTT
 GTTCTCTGTA CTTGCAGCAA ATAAAGTGCA GTCATTGAGA ATGTCCTGT GTCAGTGTGA TGTATCAAGG GATCTTCATG
 TTAATATCTG TTTCTCTGAC AACTGTGTTT TATACTTTGT ACTGTAGCTT TCATTGGAGA AGCCCTGGGC TCATAAGAT
 GATTGTGTGT GGCATTTCTT TATGGAACAT AAGCTTTTGA AATATACTTG AGGTAAATAT TCATGGGAGA CATCCAAATG
 CAGTAATGAG AGTACAATGA AGACAGCATT TTNGACTTTG GAAACCTGAG TTCAA

SEQ ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCTNCTGATG CACCCATGAG AGGGGAGACA GCACTGTCTG CTCTCGCAGT TTTCCCTTAA CACTCCCTTA TCTGCAGACT
 TAAACTAGGA GCCCCTGGCA GAGTCCTACC TCCAGAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT
 ATATCTGACT TACTAGTTTC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCCTGGCCC AGCCCAGGAT AGATAGGGAT
 GGGTAAGAAG CCTTINAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTGAGATTA GGGGTTTTAT AGGGTTTTTT
 TTAGC

SEQ ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAATTTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA
 CATCCTTCTC CTTTGGGGAA GATGATGACT GTGCTATGT CATGNTCTTC AAAAAGGAGT TTGCACCCCTC AGATGAAGAG
 CTAGACTCTT ACCGTCGTGG AGAGGAATGG GACCCCCAGA AGGCTGAGGA GAAGCGGAAG TTGAAAGGAG CTGCCCCAGA
 GGCAAGAGGA GGAGGCAGCC CAGCAGGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTN CAGCCACCTC
 ATCGGCAAGG GAGCAGCCAA AGACGGAGNC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTTC CNTGGCCAAT
 AA

SEQ ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTTGA TTAACAACAA TAATTGAAAT AAAAAATTAT GTTTATNCTT ACATGTATGC CATGTAGCAC TTTAAGGAGA
 TGAGTTTATG AAATTCATGA ATGAGAGSAT GATGTAAGTT TAAAAATCAT TATTTTAGTT GCTTTATTCT NCTATTTTAA
 ATTCAATAAT AACACAGGTG GCGTGTATTT TGAAAAGAGC CCTTCTCTCC ATTTGANCCT TATAAACACT GAGGCAGTAG
 GTGTAAAATA TTATCTCCAC TTTATATTG AAGGAAATGG GGGCCA

SEQ ID NO:1583: (Length of Sequence = 323 Nucleotides)

CTAATTTTGT TATTTTGTAGT AGAGATGGGG TTTCACCATG TTGGCCAGAC TGGTCTCAA CTCTGACCT CAGGTGATCC
 GCTGCTCTG GCTTCCCAA GTGCCAGNT TATAGGCATG AGCCACCACG CCTGGCCTTC CAGTTGTGAC CTTGTTAGGA
 TACTGCTTTA ATTCAATTTT CCATTGAAAA TAAGCATGAA AATACTGTG CAGTCATAAT TGTGGTATTT NCTGTNAAGG
 AAAGTGGCAG GGCTCTGAGT GTTTATCGGG AGACCTAACC CAGTNTCAGA GGGGAAGTCA GAAGGCTTAC TNCCAATGG
 GGG

SEQ ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTTGT AAATCACITT ATGTTTCTGA GTAAGGAAGT AATGAAACAT ACGTACAAGT AATCAGTAAG ACTTGTTAGA
 CAGCTGTGTG TCAGGATGCC TTTAAAAGGG CTGGTAATGC AGTTACATTC TAACAGAGAA GTCCAAACTA CAGGTAAAAA
 CTACGGCTTG TACTGTGAAA AATGTGCAGC TTTTCAGTTA TAAACTAGT TGAACACTGG TTTACAAGGT AATCGTAGG
 AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGTT GTGTTTGGC ASCAGCATTT G

SEQ ID NO:1585: (Length of Sequence = 328 Nucleotides)

363

AAATACTGAT TTCAGACCTT CTTGCTCTAG AAGTCAAAAT ACTTTCCCCC TGACAAGAGG TAAGATAAGG TAGAAAATAG
 AAACACTGGA AGAGAGATCT GGACTCCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGTCAGGAA
 TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCAGGG CCAGCAGGGG GCCAGCCTTN TTTGACAGGG
 GCAGGGGAGA AAAGGCCAGA CTTCCCATAC ACATGCTAGA GGGGAGGGCT AGTGTGAAG GGTAAATAAGT TGAAGGAGTC
 CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TCGAGGTGAT CGCCAGATC AAGCTGCTGC
 AGTCGGCCTG CAACAACTAC AGCATTGCGC CAGATGAGCA ATTGGGGGCC TGGTTCGGGG CGGTGGAGCG CTCAGCGAGA
 CTNAGAGCTA CAACCTGTG TCGAGCTGG AGCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA
 GCCATTNCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACACGAGTT TCTGATTAC ACATTAAAGA ATAATTCCAG GGACAGGATG ATACTTTTGA
 AAATGGAGCA GGAAATTATT GATTTCATTG CTGACAACAA TAATCATTAT AAAAAGTTCC CTCAGATGTC ATCGTATCAG
 AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGNAAATCTG TTATCATCAA
 CAAGNCCAGC AGCACCAGAA INTIACCAGC CAGTCTTGTC TNGTCAACAG GGGNTTCCAA GGGCTAATAG GAGTNCAGCA
 GCCCACTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEQ ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TCCATAATAC TCCTGCTGTG TCTGAATAT TTGTACTTCA CATGGGATTA CTGAACACTA CTACGAGATT
 CTGAATGTTT GINGCTCACA TAGGATTCCA AAATGCCCCCT GCTGTGTCTT GTTGTGCCCT CACATAGGGT CACTGCTGCT
 GGGTTCTCAG TGTTCCTCAC TCACATAGAA TTCCAGNACA CTGCGAAGAA TTTCTGAATG GTTTCTGTGA ACATAGTATT
 CCAGCACACT CTCGCTGTTG TTGAATGTT TGTCCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCGTGAN ATCGTGCACA TCCAGNGGG CCANINCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC
 ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTGTCAG CTNGAGAGAN TCAATGTTTA
 CTACAATGAA GCCACTGGTA ACAAATATGT TCCTCGGGCC ATCTCTGTGG ATCTGGAGCC AGGCACGATG GATTCNGTTA
 GGTCINGACC ATTGG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACAATCAAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACITTAAC
 AATAATTTTG ATACTGGAAT GATTATTTCA GAAGCAATAT TTTTNCIGAA AAGCATTGGT CTTCTGTACA GAAAAATAAA
 AAAGTGAGCT GCCACTCATA GTGAATTAAG AGCTGTGGGC TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTTCATA
 TAATAAAAAC AGTATGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TTNAGTCTC CGGCCTCACA ATTCAGCGAC TGCAGCTCGG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA
 GATGCAGAAG CCAATTGAAG ACCCCTGGTT TCGCGCGCGG ACGGGGAGA TGACGGGGAC AGTGTTCACG GATTCCGGCA
 TCCACGTCA TGTCCGCACG GAGTAGGATT NGGGGCCAG GCCTGGCCTC GGGGTTCCTC CGCTGCCTGC TGGCCAGTGG
 CNGAACCCCC CANTNCCTGC CACTNCAACA CAGTATTTAT TGTACCAA ATGGCT

364

SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCCA AATTATGGGT AGTCCAAAAG CCAAGGCCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAACAGAA
 ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT
 TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTAA TAAATACAAT TTAGCAAGTA CAAGAATGCT
 GATCAGCTGC AGCTCAAGAG GAAAGGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEQ ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGTTTGGT GATTCTNTTC TGTGCTGCT GATCTATTGG CGTGAGAAGC TGAAAGTGAC CAGCCAACAG CCATAACTTT
 ATGTTTAGTG AGACTCATAA TGGGTCTCCT GCTGGAAGAT CTCCCCTCTA AGANTCAGTA ATTCTAGACC TGCAAAGTTT
 GAAGTTGTAA GCATGGGAAA CACAAATTCC CCAATAGGT CCAGATAGTG ATAGAGAATA AGACACTTAC TTGCCTACTT
 CCATTTCTCA GCCCAGATAT TCTACCTATA GTGGACATGC CCATGCAATG GGCTATTGGG TTTGAGGTAT ACATTGCACC
 GTTGAAGGAC AGTGCCCTCAT CCTTGCAGGG GTGCCCTTTN CCAGTTGGCA CCACAGCT

SEQ ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTTTTCGG GGGAGGTGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAATG CTGTTGTATA GGGATGCAAT
 ATTTTCGGTG TAAGGAAGAG GTTTTAATTC ATAAATAGA AACAGGTTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG
 GGTGGCTTT TGAAGGAGAA GTTTATACCC AGGTTCAAGC TGAAGGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTTG
 GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG
 AGCTTGGCA CATAANCTAA AGAGTTTAAT TTT

SEQ ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTTT GTAGCTGGAC TTCACTTACA ATGTAACAGA ACATTGAATA TTAGATTCTG AGCATATTCA
 TGCAAACCTC CACTTTGGTG AAAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT
 TTGGACTATG CTCTCAAGAT AGAACTTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA
 CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCTGG GINATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG
 CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGTCAGTTA TTGCTGCACT AGAGCTAAAT AAAAGACATA AATATCTAAG GCACTTACTG GAATAAACAT CTTATTTCCG
 CTAAGAGGTT GGCTAGGGAA GCTCTGCTTC AGAGTATGGG TTGAGTATAA GCCTGTNCCA CATGCTTTTT GCTCTGGGAC
 CAGGAGTTGT GCAGCCCATC CTTTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTTA AAGCTTCACT TCTGCTCACA
 TCATATCTAT TGGNCAAACA TTCCATTGGG CCAAAGCAAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT
 ATTCTTTCCT CTACTCTTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATTGTCCAT ACTTGATTAT TAGTTTCTAA AGAAAGTATT CTTAATTCCA AGCCTAATAG CTCCTATGTC ATTAGTTTCT
 AGTGCAGAGA AATGTACTTG ATGAATTTTT GTTGACTTTT TTTTGTGCTA GCCAATATGA AGGTTGCCAG TCCCTGCCAA
 AATCAGCACT AAAACIATTT TNCATGAGTA ATAACAATA TATTCTTTT TAAATAGCAC CTTTAACCCA AAAATCTTAA
 GCCTATATAA ACATTCACTC AACANTACAC TCAAAA

SEQ ID NO:1598: (Length of Sequence = 355 Nucleotides)

365

TGTATTGCTA ACTGTCTTTG TAACTAATTT ATGTATACNC TAAATGGTAT AGCATGTGAT TTTATTATAG TTGATTAACT
 TTGTAATTNC TGTAAGTCGA TCGATATCCC AGTCTAOCCTG GAAAATTAAG TCTATTAAACC ATAGTTGCTG TGGGAGACAG
 TACTATTGCC AACTGAAGCC TGAATCCTTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG
 ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTTGTTTGA AGGAAGTGAAG GTTGGTAAAC
 ATCAAGAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEQ ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGTGAAG GACACAGTGG ATGGGCAGAG GNTCCTGGAG AAGAAGGGCA GINCTGCNCT CAAGGACCTC AAGCGGCANT
 GCATTTGGAG CGGAAACGGG CAGATAAGCT GCAGGAGCGA CTNCAGGACA TCCTCACTAA CAGCAAGAGC CGCTCAGGCC
 TTNAGGAGCT GGTTCCTCTCA GAGATGAAGT CACCAAGCCG GACCCAGACA GGGGACAGCA GTAGCATCTC CTCCTTCAGC
 TACCGGGAGA TCTTTCCGGA AAAGGAGGAG CTTCGGCTTG TTCCAGCCAG GTCCTTATCC AGCAGNCCIN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGTTCACAGA ACTCCAATTC TTTATTATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA
 TATGCAGGCA GCAACCTTCA GGAGTTGGGA GTTGGGGAGA AACGACTTCA AAATGCGAT AGGTACTTAT GGTGGGTATC
 TGGTGATTCT TAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAAGTGGT CANTTTCACA GATGGAGTGT TTTGTGTGTG
 GTGTGTGTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGGTGAAAC CCCGTCTCTA CTAAAAATCC AAAAAAAAAA AAAAAAATT AGCCGGGGGT
 GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT
 GAGCCGAGAT CGCGCCACTG CACTCCAGCC TCGGCGACAA AGCAAGACTC TGTCTCAAAA AAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAGTCCTT TCTAATGAAG AGGGGAGATG TTATCGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCTG
 GTTCTTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCCAGGC AAGAAATCTT CCGAAAGGTC
 AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGAAGTGGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG
 GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAAGACAG NAAAGCCGA

SEQ ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAATTT TAAGTGTAAAT GGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGTGAT
 GTGACTTATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT TNNTGGGATC TCAGTACTGG GATACTGAGA
 TCCAGGGGGG AAAATATCAC TAAGGTTGGA ATTGCTTTTC TGCACATTAA AAGCAATTCT CTTTTCCTT GAAACCTCCA
 TGTGATGTTA ATTAGGGTAA ATG

SEQ ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAAGACGT ACGACTTATT TTGTGTCTT GAACATAAGT NCTTTGTAC ATAAAAATGTG CTATGAATGT TGAGTTTAA
 ATACTCGAGC GGTGACTCAC GCTGTAAAT CCAGCACTTC GGGAGGCCAA GGCGGGCGGT TCACCTGAGG TCAGGAGTTC
 GAAACCACTC TGGCAAACAT GGTGAAAACC CCGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGTCTGTG CGTATGCTGG
 TAATCCTAGG GTTCTGTCA

SEQ ID NO:1605: (Length of Sequence = 290 Nucleotides)

366

GACAGACATT CAAACCATGG CAGGTGGCAA GAAGTATCAA ACTIACATAGAT CCTTGGGATT GTNCTTTGTA CTGGGGTGTA
TTTTTNCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CTNACCCATT TGGAAATGCA CAGAGATTCA
GGAGTGTTC CATAGAAACA GAAGATCATT GGCTTTTGTG CATTCCCAAC GCCAGNAATC TGTTTTCCTT GACTCTTTT
GATCTGTGTT TCTGAATGTT TTGATATACT GCGCCTACTG GGTGTGCAGG

SEQ ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTTGGG TACTACAGTG TGAAGCTGA GTGCATATGG TATATTINAT TCATTTTGT AAAGCGTCT GTTTGTGTT
TACTAATTGG GATGTCATAG TACTTGGCTG CCGGGTTTGT TTGTTTTTGG GGAAATTTTG AAAAGTGGAG TTGATATIAA
AAATAAATGT GTATGTGTGT ACATATATAT ACACACACAT ACACATATAT TATGCATGTG GTGAAAAGAA TTGGCTAGAT
AGGGGATTTT CCTGAACACT GCAAAAATAG AACGTAGCAA AATGGTTTCA

SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGTTT CCTGTCTCTC CTTCCTCTG AGCCTCCCTC TTCCCTGAGA CACAATAATA TTAAAATTTG
GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATGTGTCA GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAAATCAAA
AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAAA AGCCGAGACA GACCAAAAGC TAGGCCCTTT GTGCCAGTTA
GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC
AAACAGCCTT ACTACTNGGA TATGGGAAA AGTTTTTCACT TTTGG

SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCTCTTCTC TCACCTACCA TTACTAACCTC TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC
CACTATTTTA AAATTTATAT TCAGATTTGT TTGTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA
GAAAACAATG GTGAGTCCCG GCGCTCTCG AATTCACCTG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCTCTAT
CTGATTCCAA AGCTGTCTT TGCCATCTCA TCCTTGTCG TCCCCCAAA CCT

SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCTTAATAA GAAGATGAGG AATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCCAG AATTAAAGGA
CCCCGGGTCC AGTTTGAGGA GGAATCTTGG CCAGATACAA GCGCCTTGT TAATNCTCAA GAGGGAGGAG ACCTTATTIN
CTCCTTNGAG GTGTCTAGTA TGAAANTGTC TTATTTTGAA ATGTGATCT AGCCATTATC AGGNGCAACT GCAGATTAAT
CCCATTTTCA GAGGAATGCT GCTAACAGGT GTGGGNGGA GCAGCGACAN CGNAAAATTC TGCTGTCTATA GTTCACGTTT
ATGTTGGTTT TCTTTGAAAA TCAAGGGGTA GAAAATTTCA TGCTCTAGA GGAGAGAGAG GAAACACATG AGG

SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGTCGTGATT TATTAAATTG CTTTACTAC TTTTAGATGG CCATACGTTT TCAAAAGCAA AGACCTAGTA AGCCATTGT
GTTCAATTTG TAAGCTATCT TAGGTACAGG TCCAGATTAT AAATGTTACC TGCTAATCAG AGAGCAAATT TTTAAATTAA
TCCTTGTAA ATCCACATTA AAAGAAAAAG AAAGTTAGAA AAACACATAA ATTTCTTTTG TGATCCCACT ATTCAGSAAA
ATCCATTGAA AAAGCAGATG ACTTATCCGT GTTAAATTTT TAAAGNCCCT ATTTAAACTG TCATGTAAAT TCTNATTTAT
CTAATTTTTT AAAACACATA TAGNTTTTTA CTCTCCAGTT CCATAANTGN CTCANTCTG GTGANGGTCA TTACAACAGN
CATACGNGG GCATATCGGN NTAAAANGGC CNTGCGTCC TGNATNGAG GNGGGTTAA GGTG

SEQ ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TTCTACAATG TAAACCCCTT TAATATAAGC TGTTTTAATA ATTGGAAAAC AGAATGANTA
NTGTTTTTNT TTGTCATGCC CAATTATTTT ANCAAGTTTT TATTAATAAC TTGCTACATG GTAGGCACAG CTGTAGGTGT

367

TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCACGGAGT TCTTATTTTC AAAGTGAAG GTAGAAAATA
 AATAAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTCA AAATGTCTGT GNGTGGGATA
 AATAGATCAG CAACACACCA GGCCATGCAA TTTNGCAGCA AATCACTTCT GCAGTCTAGC TGCTGTTTTT CCTACTCTGG
 AATCATACTC CCCCCTTCGG TCATCINTGC CAGTTTCNCT GNGCTTCACC CTACCCTCN TTTTN

SEQ ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATTGA ACAACCTAA AGAGAAATGT TCTTACCGTT CCACAGGAAC CAGCTTCCTC CACTGGGCCA CTAGGTCCCT
 GGCAAAGCTT CCAACATGCT CGTGTTCG CAAGCTATTT ACTGTTTCC CAACCCAGT CTCCTAAAAT TTGACAAAGT
 AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTCTA AAGAAATAAG GCTTCTACT TTGAGAACT CAACAAGCAA
 TACTTCCTTC CTACAACATA CCCTGCAAT CTTAACAATA AATTACTTTG TGTCTATGNC CCAAATCTCT AATGACACAC
 AGTAGCAAAG NGTACCAAGT TCAGAACITT AATAACAGNG GTNATTAGGG CAGGTGTTAG GGCCTAGNT AAGNGCTTTG
 CATCAGTTCT GGATCAGNCT TTTAATAAC CCCTTAAGNG GGGTNAVAGNC CCTTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGTGGAGAT TTGTTGTTGG CTAGGGCAGT CCAGAGGAGA GATATGTGGC AGGACAAGTC TCTACCCCTAT ACAAGTNCIT
 CCGGAAGCC CTCAGCATAT GACATAGGCC CAGAGAAGGA TGCAAGAAT TCTGGTCATA AATTGTTTTT AAATATCAAA
 TAAATCATAT GTGCACATGC ACAACATGC CTTCACAACT GAGTAAACC AGACTCACCT TCAATATAT CAACAGTTTT
 NCAAGCGCC GTTAAAAATC AGGCATCGGA CCTCTGGNIN CGAGAGCTGG TTINATGGGG AAGTTAGATC AACCGTCAT
 CT

SEQ ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGTATCAAGG GATAAAATAT ATTTTAAAT TTGTATTCA CTTGAAAT GTAGGNCCA TTTTATAATG TATTGCTTGC
 AAAATAAGTC ATGGAAGCCC TGAAAAATTA GTCAATTCAC TAATCAAAGA AACATATATT AAAGACCTAC TATGCATGAG
 GCACCATGCT AATTGCTTTG AAGAAGACAA AGTTGAATTA GACAGGNTC CCGTTACAA GNTATTTACA ATGCAAAGGG
 GGATACAAGA CATATAAAG GCTATGGAAC TGCCCTCCG

SEQ ID NO:1615: (Length of Sequence = 393 Nucleotides)

GCGTGGTGGT GCGTGCCGT AAATCCCAGC TACTACGAG TCTGAGGCAG GAAATCCCT TGAACCAGGG AGTCGGAGGT
 TGCAGTGAGC CGAGAGCAG CCACTNCACT CCCGCCAGC GACAGANTGA GACTCCGTCT CAAAACAAA CAAAACAAA
 CAAAACCA AAAACACTGG GAGTCCCAGT TTGTAGGAAA TCATTAGAT TTTATTTT GAGCTCCAGA ACGAGTGAGG
 ATGACCTGAT AATTTTGGTT TGGCTCAGGT TGTAATGTGT TTCTGTTTG CTCGATGACT ACTAGAACAG TTCTCAAACT
 GTGTGGTGGG TAAGAATCAC CTGGGGACTT TGACCAAGTN ACATGTCTAC AACACCCGGC CCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCAGC CTCCTTGAG CTATCCCTTT CTATCCCTT CCATCCAGCC CCTGGCCACC ACCATTATAT CTATTCTGGA
 ATTCCACAG GAAAGCAGG CACTTTATAA ATCAGCGAGG GATTCACGGC GAAATGAGAC TGTTCTGAG TNATGGCGTN
 CCGGGTTGCT TGCCGGTGCT GGCCGCCGNC GGGAGAGCCC GGGGCAGAGC AGAGGTGCTC ATCAGCACTG TAGGCCCGGA
 AGATTGINTG GINCCGTTCC TGACCCGNC TAAGTCCCT GTCTTGACG TGGATAGCGG CANCTANCTN TTCTCCACTA
 GTGCAATCTG CGATATTTT TTTTTGTTA TCT

SEQ ID NO:1617: (Length of Sequence = 227 Nucleotides)

368

TTTCTTCCAT GCAACANTCT GNAGACTTAA GTGGCTTTCT NCTGTACTNC CATAGAACCC ACCCAGTACA TACCTCCAGT
 GNGGCACTGA TTTTATGCTA TACATATGAC TGTGTGTTC TCTCTCCAC CAGACTGTGA GTCCCATGG AGTAGGAACT
 AAATTTTNTT CAACACTCTG TCTTCATCAG CTCGTGTAGT ATCTTGTACA GAGTAGATAA TGATTAA

SEQ ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGGTTTT TAATGCATGA NGTATACITG TNATCCTGGA GGTGGAAAA GATTGAGTAA AGATAAAGTT TGGCAAAAAT
 GATTCTCTCC CTAGGATTG GGGATATGTA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCTT CATTTTTTGT
 CCTAGATTGA GTTATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC TATGACTTTG GACTTGGCCA
 TGCAACTTGC TTTGGCCAAAT ACAATGTGAG TTAATGTGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC
 TTCAACTCTC CACCATGAGG ACAACATTGC CCTCCTTCTT GS

SEQ ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCTCAT CCCAGGTTCAGTATCTCTC CTGCCTCANC CTCCTGAGTA GCTGGGATTA CTGGCGCACC ACCACACCCG
 GCTAATTTTG TATTTTTAGT AGAGACAGGG TTTCGCCATG TTGGCCAGGC TGGTCTTGAA CTCTGACCT CAGGTGATCC
 ACCACCTCA GCCTTCCAAA GTGCTGGGAT TCCAGGCATG AGCTACTGTN TCGGCCAAA TCTTCTTAA GTTGTGTCTG
 GCCTTTGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGT TTTACTCTTC AAGTGATGAT GGCATCCGAT AANCTTTTAG
 AGGGAGGTTT TTAAAATGCA AGT

SEQ ID NO:1620: (Length of Sequence = 379 Nucleotides)

GCAGCCGAA GCTCCTCAGG CTCCACCCCT CTACAGCTC CTTCTGCTCC AGCCCACTC ACCAGGCCCG AGTTCCACC
 TAGCACCTTC CTTGGGAATN ATCTCCCTCT GGTGGCTCT TCTACTTAT TCAGCCTCAA ATGTNATCTC CACTGANAGG
 CCTTCTCTGA CTTGCTGAGC TTGATTCCCT CCCCTCCCA GTNACATTAC TCCGTGTTAT GGTACCCATC CTTGTCTCTT
 TAGCTTGTIT TTGTCTGTAT TGGCTCTTC ACTAGACTGT AAGCTGCATG AGGGCAGGGG ATGTCTGTTT AATNCCAGTT
 GCTCAGGATA GTGTATGGCT CGTATAGAT GCCTAGNACA TTTTAAAATG GGGACGGAT

SEQ ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGGG CTCGGGGAGG CAGAGAATCT CTTGGGAGTC TTGGGTGGCG CTGGTGCAAT CTGTTTCTC TTGATCTCAA
 AGGACAATGT GGATTINGGG ACCAAAGGTC AGGGACACAT CCCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGAGTGGAA
 GGGAGGAGCA GCAAGAAGCA GCCTGTTTC ACTCAGCTTA ATTCTCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT
 GCTGCAGGAC CTCCCTCTAC TACTTCTGT CCTAAAAATA GGG

SEQ ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTTTAA AGCAGATAAT ATTTCAAATA TTTTCTTTGA AATAGACCAT TTGTCTGCC TTGAAGTATG TTAGTACATT
 TTAAGAAAGT CAGTGGGTGA AGGAGTCAGT GCTGTITAGTA TTCATGCTTA AAACACTTCC CTCTACCTA CCTAATAAA
 TGAGGGGCTC AAGAGAAATA TTCTAATTC TCTAGCGACA TGGCTAATTT TTTTTTTTAA TGTATTTTGT TATTTTITAGT
 ACAGATGGAG TTTCACCATG TTGGTCAGGC TGGTCTCAA CTCCTGAGCT CAAGTGATCT GCCTACCTCA GGCTCTGAG
 TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TTTGAGACAG AGTCTCGCTC TTTCGCCAG GCTGGACTGC AGTGGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG
 GTTCACGCCA TTCTCTGCC TCAGCCTCCC GAGTAGCTGG GACTACAGGC GCGCGCACCC ACGCCTGGNT AATTTTTTGT
 ATTTTTAGTA GAGACGGGGT TTNACCATGT TAGCCAGGAT GGTCTCGATC TCCTGACCTC GTTGATCCGC CTGCCTCGGN

369

CTCCCAAAGN GTTGGGATTA CAGNGTGAG CANCCGTGCC CAGCCGTNAA GTTAAGATAT TTTAAAAANA TCTCTGCAAG
TTGAGGAAGT NPTTCAGGAC TCTTCCTGC TTAGTCTCAC T

SEQ ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTTTGTGAGC TTTTIGACCT GGGGATCCG AGCCAGATTG ACAACAATGA GCCCTACATG AAGATCCCTT GCAATGACTC
TAAAATCACC AGTGCTGTTT GGGGACCCCT GGGGGAGTGC ATCATCGCTG GCCATGAGAG TGGAGAGCTC AACCAGTATA
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG
ACCATGTTTN TGACCGGCTC CAAGGACAA CACAGCCAAGC TTTTGTGACTC CACAACCTCT GAACATCAGA AGACTTTCCG
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCCTCTGTG AGACAAAGAA ATTATAAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTAC GTTCCATGAA
TCAGTACTTC ATTTCTTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATACCACAT CTGTGTTTTT CATTOGTCTA
GGTTAAAAA TTTTATTITT TATTTTATT TTTTGTAGA GACGGGATCT CACTGTGTTG CCCAGGCTGG TCTTGACCTC
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAACTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCCAAAA CAAGTTGATG
GTGATTATGT TGTGTCTGAA TGGAGTGAAA TTATAGAATT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG
TTGGAGAAGG CTGAAGTAT INCAGGAGC ATGCTTAAGT TTTCTGTTTT TTATCGTAAT CAGCACAAG NATATTTTGA
CTATGTTCCG TAAGNTTCAA AAATATATAG TGATTGTGTT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEQ ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CTGGTACCTG GGGACCTACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CTNTCCCTC TGACCTGGGC
GCTAGAAGGG CAAAGAACC GAGCCTGCCA GCTTGGCCTC CTCCACAGC CTCCCTCGGA GGCATGCCAT GCCAAGCACT
CTTCTGTCT CTGTTTATGA ATAAAAGAGA TGGATGGGCT TATCTTATA GAGAAGTGAA TTTCACTTAC TCCCTGGCC
CGAAAAC TAG ACCAAATGAG GAAGTGTGTT AGCTCATCAA ACTGTTATAT TTATTTTCAA CAATGAAAAC AACACAACAA
AGTGGAGTCA ATCCACTAAT TTTTAAAT CTACACAAT TGTTGCACA ACAAT

SEQ ID NO:1628: (Length of Sequence = 434 Nucleotides)

TGCACAGGCA CACCTCCACT CTTTATATCA TTTCTCCAT CTTCATTTC CCATCTGTAC CTCCAAAAT TTGCTATGAA
TCTAATTCAT CTTTGCTCTC TCTCTCAT GGGTGCCCTT GCTCTGCCA GCTTTCTTC TCTGCCCA CCCAACTTC
ATGAATTAGT CTTTCTCCC AGGAGCTCTG ATTTCTAGAC TGCTTTGAAA ATGCTGTATT CATTTTGCTA ACTTAGTATT
TGGGTACCT GCTCTTGGC TGTCTTTTT CTGGAGCCCT TCTAGTCAA GTCTGCCGA TGTCTTCTT TACCTAECCT
TCAGTTTTCC TTAACCGNG NACACAACCTC TGGAGAGTGT TAAGNATAAT GTTACTTGGT AATGTGTATT TATTGAGGAT
TGTTGTGCTA AGAATENGTA GGTAAAAATA GGGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGGAGGT GGGGGTGGCC GGCAGACAGG GTGGGGTCCG CATCCGGTAC CAGTGACAGC AGCCTCTCCT
CTCCACGGT GGTGCTGTG TGGGGCTGTG GCCAAAGTGT TTGCCCGCC CCTGACTGTA TCCTCCGGA GCTGCCGAGG
ACTGCAGAGA GGGCCTGGCT TGTCCCTCT AGGAGCAGCT GGGNNGGTGT CTGCTGCA TCCCTTCA ATGGTTGAAA

370

ATAATGATTG CACTTGTGAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACCTCTG TTCCCGAAGT GGGAAACCTN
GGGAGGGTCC TCAAAACCCC T

SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TCCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCCTCAAC ACGGGCACCG
CCATCCAGTG CGTGCGCTTC AAGGTGAGTG CAAGGCTGCA GGGTGATCC TGGGACACCC AGAACGGCCC GCAGGAGCGC
CTGGCTGGGG AAGTGGCCAG GAGCCCCCTG AAGGAGTTG ACAAGGAGAA AGCCTGGAGA GCCGTCGTGG TGCAAATGGC
CCAGTGACCC CCAGACGCGG AAACCGGGTG GCAGCGCCAG CCTGGGCCCC GGCATGGAAA CGGACAACCC CTAATCGCCT
TAGCTACTGC TTCTAACAAC TCTTTTCCCT TGTGTTAAGG GAAACAGGT TCAAGGGGGG

SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGATTITA TTTGACAGG GCTGTGCTGA GAGTCCACCC CTCACCCAC AATGGGCGGG GGCCTGGA TCGAACACCA
AGCTGAGTGA GAAGGGCTCC TCCAGGCCTC GCAGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCCCACTC
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC
TTCCAACCACT ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTTGAGGTCA TTTTAAAGG
GATTCTTCCG GNAAGAGGAG CNCCGCATCG GCGNCTTAA NCCGGCGTTT CGGTTCATCC CGA

SEQ ID NO:1632: (Length of Sequence = 424 Nucleotides)

GGGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCCA CTGTCTAAGC CAGTCTCACT CTAGGACACC TGCCTAGCGA
CCAGCAAACC TGGAAATGAAA GGGCAAGTTC CTCAGTGGCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC
TGACTACCTG CTTAGTGATT TTTGCTTCTG TGCTCCAGA CCAAGAAAA CCACGTCTCT TTTCTTCTT CATGACTCA
TCCCCITCTT ACCCTATATT GTCTCTCCA CTCTCTGCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCTGG
GACATACCTA TTTCCGCAAC TGAACCTTCC CAACCCCTAG GAAACAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC
AAGAGGCAT GNACCATAAT TACT

SEQ ID NO:1633: (Length of Sequence = 417 Nucleotides)

TTTTTCTAC AGCATCTTTT TATTGTCTTT ACCATTACTT TAATGCATTT TAAATTTAT CTACATTAAT TGGGAACAT
TTGCATTTT TTCACTCTCT CTCTCTTTT CTTTNCITTT TTTTGGATTT GTCTTGCCA GAGAGGTCT CCAACACCCG
GGTGGACTTG GAATTTTTTA TCAGCTGCAA TCTGAAGACT TGCTTTACT GTGGAATAGG TGACATTCCT TTAGGACCTC
AGAAGCTCAA GTAGTTTAAAT GCCAAGTCTT TCCAGAGCCT CACTCTCTT TATTTTTTAA ATTAGAATTG TGATTTATTG
AAGNCTTACC ATGGGGTTCA TATAATTINT NAATNGANCA GCTTTATGA GGTATAATTC AATACCCCTT TAAAGNATGT
AACCGTGGG TTTAGAC

SEQ ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGTGCAATG CATCACCTGA GACAGAAGGC AGAAAGCATC AAGCTCTCTG TTTATCCCAA TTCAATGACA
ACCAGAACTT ATTTTTTTTG AGATGGGGTC TCGTCTGTC GCCAGGCTG GAGTGCACTG GGGCAITCAT GGCTCATCGC
AGCCTCCAAC TCTCAGTCTC AAGCAACCCCT CCTACGTCAG TGCTCTGAGT AGCTGGAATC ACAGGCAATC ACCACCACAC
TTGGCTCAT TTTAAAAAT TTCTGTAGA GACAGGATCT TGCTACATG CCCAGGCTTG AGGTGCCGTG GTGCATTAC
AGCTCACCGC AGCTCAAACCT CTTTGGTCTC AAGGATCTCT CTTGNTCAG CTTCTGSGT GGCTGGGCTT CAGGCATACA
CCACCATGTC TTGGTCAATT TCT

SEQ ID NO:1635: (Length of Sequence = 384 Nucleotides)

371

CAAAACTCAC TTTGACCCCA TTAAGAGGCA AGCCTGGCAC ATCTATCCCT GGGCCTTTAG AAAGCCATTT GCCTCAAATG
GCTATAGGGT TGTGGGGTGG AGGGAGGAAG GGCTGGGAGG GAGTNGGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA
GTGTTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGAGGATCG
CTTGAGACCA AGAGTTTGAG CCTGCGGTA GCTGTAAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT
TNTCTACAAG AAATTTTTTA AAAATGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCCTTCG TGTGCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA
ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTTG GGAATTTCCA CCATCCTGAA TAGTATCACT GCAGTTGACA
CAACTTCCAG GGAATGCGAG AGTAAGTCT TAATATTATC CACGAGAAAG CAAAATAAA TATTAGTGTG CACATTTCGT
AATGAGAAAC TAATGCTTC ATTGATTCA ACAATGTAGT GGNAGNAAAC TATTTAGAT CTCTACAATG CCTAAATGCA
TTCTATTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GGGCCCCGAC GAGGCTCAGA CCTCTNTAC GNCGACTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT
CGGGGACGAT GAGGATNACT CTGGCAGGA GGAGTCCINA CACCACCAGA ATAACTTGC CGAGTTTANC TCCTAGGGC
CGGACCCGTG GCTCCTTAGA CGACAGACTA CCTCACGGAG GTTTT

SEQ ID NO:1638: (Length of Sequence = 253 Nucleotides)

CATCAGGCT CACCGTCTG CTCTGCGAC CAGCCTTTCC AGAGCATNCC AGTNCATAG GCTTCATCTG TTAAGTGTG
ATCATTCAG TCTGATTTT TAGACCTAAA TGGTTTCCTT AAGGCCATTC TAACTGCCG TGACTCATTT TCCTTACAG
TGTATTATGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CTCTGTCCA TAAATCTCCC CAGTCTAACT TTTTGTCAAT
CAACATGRCT CGT

SEQ ID NO:1639: (Length of Sequence = 360 Nucleotides)

TGTGGCCAAG GACCTATCG TCAATGTATG GTACTCTGTG AATGGTGAGA GGCTGGGCAC CTACATGGGC CATACGGAG
CTGTGTGGTG TGTGGAGCT GACTGGGACA CCAAGCATGT CCTCACTGGC TCAGCTGACA ACAGCTGTNG TCTCTGGGAC
TGTGAAACAG GAAAGCAGCT GGCCTTCTC AAGACCAAT CGGCTGTCCG GACCTGCGGT TTINACTTTG GGGGCAACAT
CATCATGTTT TCCACGGACA AGCAGATGGG CTACCACTGC TTTTGTGAGC TTTTITGAC CTGCGGGATC CGAGCCAGAT
TGACAACAAA TGAGCCCCTA CATGAAGATC CCTTGCAATG

SEQ ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTGGGAGGCC CTCGCTTG TCTGAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCC TGGATGGGCC TGAGCATAGC
AGACCAGGTG GTCACATGTG CATGTGTGGA CATGTGTGCA TGTGTGGATA TGTATGCTCC TGAGTGTATC TGCATGTCTT
NCCTGCACAC ACAGTGCTCC CTTCCGATGC TGCCAGCCTG TGGTGGACTT CCTCTCTGA CCCCCTTCTT GCNCCGGNC
TGTATTATCA GTGAAAGGAC TTAACAAAGC AGATCTCCAG GTTCACCTIN TGGAATCAG CTCAAGGTA GCACAGCAGG
T

SEQ ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGTGTGCCA CTGTGTGAT AGTTTTCCTC ATCTTAGTAG CCGNACCAT AATTAAAGCC TACTCACATC AAGTTAGCAC
CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCCTC TTGNNCCGTG AGGTGSGGGG CTINCATCAG AATGCAAATC

372

TRCCGAGGCG TGAAGCACAA TTTAKTTCAA CTGCCATKTK TTCTTCACA GTAAERCCTT CTGGRGGAAG GAAGCAGTGT
GTTTGAGTTA TACCTTAGGC CAAGCT

SEQ ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCTCAGGAC CCCGGTCACA GGCACCCGGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC
AATGTGGGCC TGAGTCTCCT NCCCACTCAC GTCACINCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NGGCATGCCG
GGTTCTTAAC CTCAATTATT CATTCTGCTC TCAGGCACCT CCTGACGAGA CCTGGGCCA GGAGAGCTCG GCTCGGGGAC
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATTGGTA GTTTAAACTT TTCTCTAAT ATTAGATTGC ATGCAGGATT TTATATCTAA TTA CTCTGGC AGATGGCCTT
TAGAAAGTTC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTACTAT TGAGACCAAT GCTTTCTTAA CTAAAAGGTT
TTGTTTAAAA TCGTTAGTTT AGGAAATCTG ATAAAGATTT TTGAATATCA GACCGTTTAA AAGAGATTCT TACTTTACAT
CTGGCATATT TCTTGTTGTA CATATTATAA TTCCATTGGA ACATGGCTGT CTGTAAACT ATGTATATGA TCCGGAAGAG
ACTCAAATTA AATTAAGGTT TAACAGCCAT CAGTTTCAT

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCCTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT
CAAGAAAAAA AAAAGAATTA AAAGATGTGA ACAAAGCAA GAAAGTGTG TATGAACGAA ACGGAAATAT CAATGAAGAG
AAATAAAAT TATAAATTC AGGAAATGAG ANGTACANTA NCAGNAAATT CACTGGAGAG ATTCAAAGC ATATCTGAGC
AGGTAAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEQ ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCTGGA TATTAGGAAA TGTGAATATT AATTCTGAAT TTGTTACTGA CTCAGGATGA CCTTGCATGA TGCATCCAAC
CTTCTTTTCT CTATATCAGA AAATAAAGA ATAAATGTAA CATCACATTC TTTCTCCTT TGGGACAAAC AACTATGTAC
AATTGAATAA AAATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT
TCAACATTTT TTATACCTGT GCAATAAATT TTTAAATGAT GTCTGAAATG CTTTGAAATC TTCAGAAACA GTTTATAAA
TGGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGTNTCT CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA
AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC
ATTTGTTTCA AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
CTNAGGAGTA GCTGAGAGGA AAATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA
AGGGTT

SEQ ID NO:1648: (Length of Sequence = 338 Nucleotides)

373

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
 GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
 CTGAGGAGTA GCTGAGAGGA AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA
 AGGGTGGGGT TTTATGINTG GGAAAGGGAC CCGAAGOCCA GGCTGAAGAG TTTTAACTTT GGGCCCAGAA ACTCAACCAT
 CAATGGAAAC AGGGCAGT

SEQ ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTINAG GATTGAGACC CGGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAAGTGA AGAAGTTCGG GAAGTCAGAG
 TTTGACCCCC COGGACCCAA TGTGGCCACC ACCACTGTCA GTGACGATGT CTCTATGACG TTCATCACCA GCAAAGAGGA
 CCTGAACTGC CAGGAGGAGG AGGACCCTAT GAACAAACTC AAGGGCCAGA AGATCGTGTG CTGCCGCATC TNCAGGGCG
 ACCACTTGGA CCACCGNTG CCCCTACAAG GATAC

SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT
 SCTTTAAAAA AGGAGCTGCC ATCATATTAT ACCCTGACCC AGCTGGATAC GAACAAATTC AGCCTTGGA ATGCAAGTCT
 TACATCTATT TTATATAGAT TGTATAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTTG TGTGTGCTG
 GTAATTAATG AAAGAGAGGC TATTGAATTT

SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTTGCTTTT TAATTGIATT TCTTAACACT AGAATTTTCT ATTTCAAGTT TTTGTACGTG GCCTTGCGTC TCCTTAGTAC
 ATTTIATAGT CGCTGTAAAT TGATTCCATT TTTCTTGAAA TTGAATTCCT ATCTGACCTA ATTTCTTCCT TGAATCCTAC
 ATCTCACTTT CTCAATGGAC GCAGTGACGC AATGAAGCAT CCAGCAAAGC TTTGTGTGTT GATGTGTTAG GAGTCACCC
 TGTTTTGTGTT GAAGTGTGCT CACAACACT TCTCTTTCTG CTTTCTCTCT TTCATATTGA CATGTGTTTT CTTTTCAAAT
 GGATTAACIT TATTGATCAT CCTCTGTGNC TTCTAGCAAA AGACGGGTGC TT

SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TTTCTGAGTA TGCTGCACCT GATTATTAGC ATGTTAAATA GTCAAAGGGA CTGGAATAAA CATCAGGAAG ATTTCAATAA
 GTGGTGTAAG TAGAAAAAAA AGGTTAAACA ATGAGCTGCA TGTGTATAAG TATAAGACAC TGATCCAAGT GGTGGCTTCT
 GAACCATGAT ATTACTTAAN CTAGAGTGT TAAAGTCAGCT TAAGTCAAAA TAAACAAAG CTCCAAACC CTCATTTTAA
 ACACAGTAGA TAATAGATGA NTCTGTATC TTGGGAGATA GTACAAGCCA AANGTTACAG CTGTGTTAAA ACCT

SEQ ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GGCTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAAGT ATAGGACTTT GGTCTTAACA TTCTGAGCT
 CCTGAATCAA TACTTTAACT ACCTTCTATG AGACTTCTTG TCACATGAGA AAAATTAAGC CCCAAATTAA ACCCTGCTT
 TINACTGTAA CTCTCAATTG AGCATAATTC CTAAATGNTT TAATCAATTC TACTCTACTC TGGCATGATT TTNAAGGCAT
 TAACCATAAT TTCTTTCCAA TCTAAAAAGG GAACIANIAC TTAAGTGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA
 GGC

SEQ ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTTGGCCT GCAGGAACAT GGCAAGGGCG AGTGAAGCAG TGTCAGCAT TTTAGAAGAA TGGCATAAAG CCAAGGTAGA
 AGCAATGACC CTGGACCTCG CTCTGCTCCG TAGCGTGACG CATTTTGCTG AAGCAATTCAG GGCCAAGAAT GTGCCCTCTC
 ATGTGCTTGT GTGCAACGCA GCAACTTTTG CTCTACCCTG GAGTCTCACC AAAGATGGCC TGGAGACCAC CTTTCAAGTG

374

AATCATCTGG GGCACITCTA CCTGTCCAG CTCCCTCCAG GGATGTTTTG GTGCCGCTCA GCTCCTGCCG GTGTCAITGT
GGGTCTCCTC AGAGTCCCCA TCGATTTACA GG

SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAATT GTGAGACTGT TTGTATATAT TTTTGTITTA TATGTTTTTG TTGTTGTTAT GTTGTIATNT TTATTTATAA
AATGATAGAT CTGTGGGTAG GTTCTGAGAA ATGAATAGCT TGTATTTTCT TTTTATGAA AGAAGAACAA AATGAAGTTC
AAGTGAAAG TATCTCCAGA AAGTTTAACT TTTTCTTATT AACCAACTCA TTGATTGGCA TGTGAAACTT GAGATATTTT
ATATAGCACT TTTTAAATGA GGATCTAGCT TCACTINTATC ATACAACCAC ATTTAAAATA GCCAGGTCCA TGTCTATTAT
AGGGG

SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNTTAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTT CATGTCATAG GTTGACTTCT CCAGGAAACC GACCCCAAGT
GGAAGGTTTA CATGCAGGTG GTTTATTAGA GAGTGATGTT GGAAGAACA CCTGTAAGGN AAGAAGGGAG CCTGGGAAGA
GCAGNGGNAG AAGGTGAAGT CTGATTCAGT TGCAACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCTCTGT TACTC

SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACITGACTT TGCTTTTTTC CCCCCAAGTA GAACTAATGC TAGCTTCCAG CTTGAAAGTA AAACCTCCAGT GTGGAGTGAA
TTTTGTGTCT AATTATAAAC CTGTAACCAA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCTGTATAAA
CCCCCTTTAA AAGCATATTG CATTAGTAC AGAGCTCTTT TTGAAATGN AGGCTGGAGA TGTGCATTTT TCACGGTGTT
AACTGGTGT ATCTATTAG CAAGGAGATT GGGGTTTTG AGTGTTCG TGGTGGGT TCAAATTTGC CAGGGGAACC
AGTGGCAGG CTGCTAGCAA GGCAGTGAG AAGCTCTTG CAGCCAAATG GGTGCATTT CAGGG

SEQ ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTCTCT CCAACACTG CCCCAGAGC CCGTGTGTA ACGTTTACCA GCACACTACT GGGCTGTTTC
TCTACCACTT GATTGAAATG ATCCTTATGG AAGCACAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTATGCTT
CTATTTTTCT TCACTCTCC AGGATGTTG AGAGCTGATC TTCCCTCCC TCTTGAGCCT CCTCTCTGCT CTGGCTTTTA
GGGGTCTCTG CTGACTTTTC TTCATTTCTA AACACATGTA CTCAGGGGT CCTCAGCCT GCAAGGCNA TGCAGTGGT
ACCCAGTCTT GTGGGCT

SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGTATGTGAA GTCAATCACT TTTTATATGC AGATAATATG CGACTTATAA TGGAAGGTCA CGTTTCAATA GCAACAAAA
AAGCTATAAG TAACAAAGAA TAACAAACT ATAAATGTAT AGGCTCTACA TAAAGAAAAC TATAATTCCA TAAAGGATCT
AAAATAAAC GNGTAAATGG AAAGACAAGA TGTGTTGTGA GATAOGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC
TATTATGGAG CTCTCAAAGT ATACTG

SEQ ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCITCC ACTTGAATGC ACTGCCATAT TGTCAGCTG CATTCCTTAA GCATCACTTC TTAGAGGCTT
CAAGCTTCTC GGAATGTTT GATGACTTAA AGGGGAAATG AACAGGTTCG AATNATGCTT GTCAAGNTTC TTCTTGTGAA
CCTCTATTG GACAATTCAC ACAAAAAAG AAAGCAGCTC ATTTCTAAT TCAGGATATT ATTTCTTTT AAAACTGGTA

375

SEQ ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCTCCC CTGAGGGCCA GGCCTTGGAG AACCGGATGA AGCAGCTCTC CCTACAGTGC TCAAAGGGAA GAGATGGAAT
 TATTGCTGAC ATAAAAATGG TGCAGATTGG CTGATTTCATC CTGGGCCCTG GCCGATATGC ATATCAACAT TTATACATGG
 AACGTGAGA ACATTKTGCC AATAATCATT TAATATATGC CAAATCTTAC ACGKCTACTC TAAACTGCTC TAATGAAGTT
 TCAGTGACCT TGAGGGCTAA AGATTINTCT TCTGGTGTA GAGCTCTTIG GGCT

SEQ ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTTTCATC AGGCAAATNA AAGTAACCCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACTTCC CACTGGCCCT
 GGAATAGCTA AGTGCAATGA TTTTGTGTGA GTTGAGAT TTTTCTTTC ATGTATATTT TACGTATTTC TGGGGTAAAT
 GTATTTTWA CATGCATGA ATGTGTAATG ATCAAGTCAG GGTATTTGGG GCCTCCATCA CCTTGAGTGT TTATCATTTT
 TATGTGTGGT AACATTCCAA GCCCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGTGGGA CTCTCTGTGG ATAGACTGAT TCTTGTTTAG AAACAACAGC AAAAAGAAGA AGGCAGGAAA GAAACTCCCC
 GGCTGGGAGG AATGTCTCTG TGATCCCCAT TCTTGATGGA GGGAGTGAAA AGGGGCCTGG NCITCGCCCG CTGCTCTCCT
 GACAGAAACA GTAAGINACA CCAGGACAGA AGGCAGGAGC CCTGAGAACT CACGGCGCTC TGCATGGTCT CCAGCCNNNC
 ACCCGTCTCC AGCCACCCCT GGAGCGGCCG TGGGGAGGCG GCAGAGGGGG CTTTTCGGAG GGCCCACTAT TNCACACGT
 CTTTCTTTNG ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GTAAATAAGA AAGTGAAATA ATTCTATATA TGTAAGGTTG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGTCTTGT
 GGTITAGGAA GCATAAAATT ATGTAACTTA TTGTTTATTT CACTCAGAAA ATAAAAGTAT TAATGAAAGG AGTTAGAGAT
 GAACAGATTG ATACAAACTG TTCTATGGTT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA
 TGTCTTTTAT GCINTTCTT TTTACATATG TATCTINTTG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA
 CTATTAATAA TTAA

SEQ ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACTNCTA TGAAGCATCC CTTCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA
 ACACGCCAGA GGCTTTTGGG ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACTNT GGACCTTGCA GGAGTGAAGA
 CTGTRATGTG TGGTCCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCCTTTGTCT GCATTGACGG CCCTGTGACG
 GCCTCCAGCC CACAGGCTG CTTTCTCCTG TCCTAACACC AAGCCTGGGT GSCAGATGAA CAGTGCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

TTTTTTTTTA CATACAAAGT TTGGATTTTT ATTGAAATCT TGTAGGTAT CAAACAAAT CTGCTTTCTT CAGATAAAAA
 TATTCTCTCA GATGTCTCCA GATAACTGCT AAGTCTAAAT TGGTCCITCA ATGTCTTAT TTTATTGTCC TCGTGAATG
 TTCAATATACA GTTAAGATGT TCCCAAAGG ATTTTATCG TGTAAAGGAG CGTACATGAC GACCTCTACC ACTGCCCTCA
 CTAACAACT TTCTCTTGA GCCTCCACTG CCGCTATTTG CACTAGCCCA GGAAGGTCC AAGTCCCCCA CGACCTCTAG
 AAGCACGGTT CCGAGGACT TTGGCGGTAA CC

SEQ ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAAATATG CCGCTGCCCA CATTTTGGTC CATCTTTTT TTTATATATG TTCTCTTCT TGGACTGGAT AGCCAGGGAT
 GTTTCANCTT CTGCTGCTC AAGTACGTAC CCTTGACCTA CAACAAAACA TACGTINTACC CCAACTGGGC CATTGGGCTG

376

GGCTGGAGCC TGGCCCTTTN CTCATGCTC TTNGTCCCT TGGTCATCGT CATCGGCCCT CTGCCAGACT GAGGGGGCCG
TTCTTTTGTG ASAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGTTTA TTTCACAAAC ACTAGGAAGA TGGGTTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC
ACAGAGTCAG CAGCAGCAGC CTGNTCCCCG CACTGAGGAC TCGGCCTGGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA
GAGGGGAGTN CAGNGAGGGC CCTAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA
GCAATAAATA AAAGTNGGC ACGGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTTAATGAC AGATTTTCCT AAAGAAACC ACTATAACAT CTGTCCAAGT ACTCCAGAGA AAACAAAAA TACATAAAGA
TTAAAAGTCT ATTACTTTAA CAGCACATTG CCAACACCG ACHACTAGGA TAAATGCCAA GAAACCTTAA AAAATAACTT
TAAAAGATGC AACGTTCAAG CCATTCAAAC GCGTAGGTTT CACAAACAAC AGGNNACAA GTUCAAGAGC AGTTCTACTT
GTGCATGATG GTAACTCAGA CTGTACTTCA TCAAAGTTCA TTCAGGTGTT TCATAGGCGT CTGAGCAGAG TTTTGTITTT
TCTTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATNTTGGGC AACTTGACAG CAGAACAGGG
TAAAANTGAG TTAGCTACAA AGGCTCATCA GAAATGGCA ATAGATTCCA GAGAGATTTA ATAAGTACTT ACAAAGTCTG
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG
CACTAGATAA AAAGGAANCC CAGCATACAG TGTTACCACA TGTAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTCAAGAG AAAAAGTTGA GGTCTTAATA ATTTTKGGC AACTTGACAG CAGAACAGGG
TAAAANTRAG TTAGCTACAA AGGCTCATCA GAAATSGCA ATAGATTCCA GAGAGATTTA ATAAGTACTT ACAAAGTCTG
CTATAGGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGTTTATT ATGTGAATTT TTTACAATAC AAACAAAAA TACAGAAATG CAATATATGA ATACAGCTAA
ATGCAGAATG GTGACTTTTT TCTCTTCAAG AGGCCATGAT TCCATTCTT AGTAAATAA AGAGACTGCA TATAGGTAGA
AACAGGTTGG TCATTAGCTT CACAATTTTG CCTAGAAATG ATCTATAAAT GCATTTCCCC COCTGCTACT TACCCTAAAG
TGTAAGAAAGG GAGTTAAAGG AAAGTTTCCT TGTGGTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCTACTG TGATTCTCAT CAAGCTGGAA GCGTGTGAG AAAGCACTTC AGTTTCTTCC CTCGGATATG AACCTGAGCT
CTCTGATGAG GTGGTTTAGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCAATCTCC TGGCAGATGA
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCCTCACGCC TAGCTGCTCT ACGTGTGTCG TGCACAGTGG CATCATGCG
GGAAGTAGAA AAACCTCTGA TGCCGTGCCC CACCGGGCTT AATCACAGTG AAGTCAGATT ATCTGGGNC TGGACCTTAC
CATCATTTTT TTTAAGAAT TGCAGGGGCC AGGCGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

SEQ ID NO:1674: (Length of Sequence = 377 Nucleotides)

377

CTGAAATTTG GCAAGAAGGG GCAAAAACGT GACTATTAAT GATTGATAAG CACCACTGAA GAAGTTCTAA CTTTTCAGCAT
 GCTGCACAGA AACTGGTATA ACATGCCCTC AGTATACTAA CACTCATATG CTCAGTTTTG TTTTGTTTTG GCAGTTGACA
 AGAAGTTAAT TTGCTTTAGT AAAAATCCCT CATTCCAGCC TTTCTATATA AATAGCTCTT TCTTGCTGTT TTAATGTGGT
 GCACACTATA GCTTCACAAA CCTGTTATTC CAGTGTAAATC TGCAGTGTG TAACTAAAGT TACTGGCTTG GGTCTTATTT
 GCACAGTTTT TGCGNCTTGT TTGCTTCTTG CATCTGGATT AACTAGGAAT ATTCTC

SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGTCAA TCAGCTACGC ACCCAGTTCT CAAAGACCTC ACATGCTAGG GAAGGTGCGG AGGCAGAGTT GTGGTTTACA
 AGCAGTTACA GGTCTCAAAG CAAGAACAGC AGCCAAAGCT TCCAGCCCT GACGCTGCT CTGAATGGTA AACCAATGGC
 ATATGGTATC CACAGCTAGG CTTTGCTTTT TTCTGAGTGA AGGTAAAAGG CATTTGAAAA TAAACCAAAG TTTCACAGAC
 TATGTTTATG GAACAAACAT GGGCCATTTT CAGGGATATA AAAGTCGATG TTCTATGTAG GCCCCATAT GAGTATTTAT
 CTACTTTTTA TTTACTTTAT TTTATGGAAT TTATTGNC AAGGGCTTCA CTCGTTCGG A

SEQ ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTTGAT TGCTTGAGCC CATCACAGTT TAGCTCTCAC AGCTTTAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA
 ACACCATTTT GACTCTCAA GAACATATC AATGTACATG GATAGCTTCC AACTTCATAA GGTGTTTCTC TCTACCTAGA
 GCAATTAACA TTAATTTGCA GAATAGTGT TATTGAAAAC CTTTGTGTAT CTCCAACAAA GTAATAGTGT ATTGATTTCA
 TTCTTACTAT CTTCAACTGT ATCATTAAAGA GGAATTTCTT AGGNAAGTCT ATATGCAGTA AGCAAGTAAG ATCGCAGAAC
 ATCAAGGGEN GGAAGTAAAT CCCAAACTG GNTTTTACCT TCCTTTCCT TAGGTGAGGG AAAGGAATTT ATGTTTTTAA
 AGCT

SEQ ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAAC ATGAGCCAGG AGCTACACA GAGAAGGTTT TGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCAGG
 TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG
 ATGCTTCCCG CCTGGTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTINGAT
 GACTCTGACT TTGAGACAGA AGATTTTGAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG
 CCCAGAGTTG CCCCGGGCGA TCATGGCTCA AGCTTCCCCA GGGAGCAAAA AAGCCGGAAG ATTTTCGG

SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACTGTGCA AATAATCCAT GAATATATTG TTTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCTCA
 TCCACTCCTT CACTCCATTG CTACACTTAA AAGCCTCACA TGCTCTCCTG TCCTCTCCAA AGGCAGCTGC TAGCATCAGC
 GCCCACAGTA GCCTTCTTTT GTTCCCTGTT TATAAACCAT ACATTTTCTA TGGCTACACA TACGTGTATT GTTTGATGCT
 TTCTAATAAA ATTGTATCAT AGTGGTACAC ATCTTTCACA CTTTCTTAT TACAGTCAAC ATTTGGNGGA ATACAGAATG
 CAGCAGATCA AGGANCTTTT CTCAGTCTTT TCTAACATGN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGNGGCT
 CATTTGTTTT CACTCTCACA ACGGTGGC

SEQ ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCCTGCTGCC TGGCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCTCA AATCCACCTT
 GCAGCTCCCT GGCTGCAAAT AACTCACTC CATCTTTTCA ACTCGCTCCC TGGACCCCTG GTTAACACTT CACTGTAACT
 CCTCAGTTGT ACAAAGCATT TTCATTTGAA TACAAAGGC AACTNGNCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA
 CTGAATTINA GGCTCA

378

SEQ ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCACTAGT TCCTTTCCCG CTTTATTTT TAGCTGCTTT TTGGGTTTTA TACAATGAAC ATGTATTAAAT TGTAGAAGAA
 AACGATGTCA TCCTTTATGA TAAATCCAT TTCCATTTTA GCTTTTITAA AAAAACAAAA AGCTGTGTG GACAGATGAA
 CATCCAAGTA CTGGGCACAC CTCCAGCCCT CCGTCTTCCA CTGAAGGCCA TTGCCTATTCT CTAGAAAGTT CTTTCCAGG
 TATGCAGCTT TCAGTTTCCA CTTACAGAGC CACAGTGTCT GGGGGAACGG ACTGCCCCCA ATACTAAAGG GAGTCAAAAT
 CTCCTTAATT NCCGCACTTC CTCAGTACCA ACAAGGAAGT CCGTCTTITA GGGCCACTGG ATGGGAACCT NGGGACCCCC
 CTTTTTGTAT TGGCAAGCAT TGGGNTCCT AGGGCCTT

SEQ ID NO:1681: (Length of Sequence = 370 Nucleotides)

GTCTGGGAAG GGTACAATGT CGTCCGCGCC TCGAGGGCCA TGATTGGACA CACCGACTCG GCTGAGGCTG CCCCAGGAAC
 CATAAGGGGT GACTTCAGCG TCCACATCAG CAGGAATGTC ATCCACGCCA GCACTCCGT GGAGGGGGCC CAGCGGGAGA
 TCCAGCTGTG GTTCCAGAGC AGTGAGCTGG TGAGCTGGGC AGACGGGGGC CAGCAGCA GCATCCACCC AGCCTGAGGC
 TCAAGCTGCC CTTACCACCC CATCCCCAC GCAGGACCAA CTACCTCCGT NAGCAAGAAC CCAAGCCAC ATTNCAAAACC
 TTGCTTGTC CAAACCACTT ACTTCCCTGT TNACTTTTG CCCCANCCCA

SEQ ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGTAATCCG CTGCACCAA CACACCTCA CCAACCACAT GGTITTTAAG TTTGACTGCA CAAACACACT CAATGACCAG
 ACCTTGGAGA ATGTINACAGT GCAGATGGAG CCACTGAGG CCTATNAGGT GCTCTGTAC GTGCCTGCC GAGCCTGCC
 CTACAACCAG CCGGGACCT GCTACACACT GGTGGCACTG CCCAAAGAAG ACCCCACAGC TGTGGCCTGC ACATTGAGCT
 GCATGATGAA GTTCACTGTC AAGGACTGTG ATCCACCAC TGGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTN
 CTGGGAAGAT CTGGGAAGTT TACTTGTAGC TTGTTACAT TCCAAAGGT TCATGGAAAC TGAACCTCGA GCAGCCT

SEQ ID NO:1683: (Length of Sequence = 396 Nucleotides)

GGCTGCGCAG AGGAGCCGCT CTCGCCCGC CCACCTCGGC TGGGAGCCCA CGAGGCTGCC GCATCCTGCC CTCGGAACAA
 TGGGACTCGG CGCGCAGGT GCTTGGGCG CGCTGCTCT GGGGACGCT CAGGTGCTAG CGCTGCTGGG GGCGGCCAT
 GAAAGCGCAN CATGGCGCA TCTGCAACA TAGAGAATTC TGGGCTTCCA CACAACCTCA GTGCTAACTC AACAGAGACT
 CTCACCATG TGCTTCTGA CCATACAAAT GAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGTT GCCTCAGACT
 CCAAGTNATA CAAACGGTCA CCACCATGGN AAACCTTACA AGCGGGCATT TTAATTNCAA ACANCAACCA GGGGAT

SEQ ID NO:1684: (Length of Sequence = 417 Nucleotides)

ATCCAGGGGA GATGCATGTG GAAATGTGGT CCTCTGGGT CAGACCCCTG CAGGGACAT CTGCGCTTIN AGTGTGCAGA
 GTACATGGGG AAGGGGCTGG GGGCACCCT GTGTACCTGG GCCCAGTAAG GCATTTGCCG TGATTCCAC AACGGGTCA
 AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCCC TGCTATAGAC CTTACAAAC GACTTCCACT GCTGAAGCCT
 GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGGTAATTTA AGCACCGATT TCCCAAGTGC CCACTCTCCT TTGTGCTCTG
 TTGGCTTTTG GCCTAAAGCT TNCCAGAG TTAGGGTGA GGATGTCTGT GGTCTGTGAG ATGCCTTTCC CTTCCCCCT
 CTGCTTCAAC CGTGGTT

SEQ ID NO:1685: (Length of Sequence = 429 Nucleotides)

GAGCCATGGA GAACTCTGAA AGGAAGAATC GCTGCTTINC TCAAGCAAAT CGTTTCTTG ATGTCTTTTG GTTCTCCTTG
 CCTGCNCTG ATGCTTGGNC CCGTTTAATT GATCAGAGTG CTCTAGAATA ATGGATGGTC TTGGATGATG GATAAATAGG
 GACAGGGACA GTTAAATTGG GAGCCTTTCT TACAACCTIN ATGGGATTIT CCCCCCAAG TTCTCTCTC CACTGAAATG
 CCACACTAAT GCTTGTGGG ATTCATGAGG TGGCCAGACC AATGTGTTGT TTGTGTGTG TTTTITTTT AAGCTTCCCT

379

TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTTTAAAC AAGGGTCTCTG GGTTCCTCTT TGCAAACACA GTAGGCTTAA
ACTTTGCTCTG CTTTTTAAAA TGGCATTMT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGTCCTCATA ATATAACAAC ACTAATACAC TAATAGTAAG ATTAAGTTAG GCAGTCTTCT ACCAAATGTG TAATGGAGAT
TGCTCAAAA TTGTGTCCAC ATAATCCACG CTCATCTTGC AAAGCGCTAT TTCAGGCACT TTTTTTTGAG AAAGAGTCTC
ATTCTGTGCG CCAGGCTGGA GTGCACTGGC GCAATCTTGG CTCACAGTAA CCTCTGCCTC CCGGGTTCAA GCGATTCCCC
CGCTCAGCC TCCCGACTAG CTGGGACCAC AGGCACGNAC CACCACGNOC GGCTCACCTT TGTATTTTAA AGTAGAGATG
GGGGCTCAGC CATATTTGGT CAGGCTGGGT CTTCAATCTN CCTGGACCTC ATGNTCCACC CGCTTGGGC CTNCCAAAAG
TGCTTGGGGA TTANAGGGAA TNGGCCACC GGGCTTGGG CCAAT

SEQ ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAAA TAAAGCAATA ACTTTAAAGA CCTCAGACAC ACACAGTATA AACACCTGGG TAAGGTTTIN TCCGTGTCCA
TGTTGACACC GGAAGTACCG TTAAAGTGCA AGTTTGTGTT TGTTTCCTT TGTGCAGTTT CACTCACATG TAAACAAGTC
ACTTGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGTGATTT GATGTTAACA CTAGAGAATG ATGACTGTAG AACATTTGAG CAAGTAAAAT AGTAAAGCAC ATAGTGAGTG
TATGTCCATC TAACTGGTAC ATTGATAATT TAGTTTGGGC ACATAAAAGG AATATTTTATA TGGCTTCCCA AATGCAGAGT
TACATCTTAT TCGTGTATTT CTCTGAGTAT TTATATCCCG TCCTCTTTT TCATTCTTAA AAATAAATGA ATTTTCACTG
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATTCTAAT TTTTGCAATAT ATTGTAAATG TGTCTGGTAT
TTACAGCAAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGCATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTCTGTCTGG ATCAGCGTAT TCCTAGATTG GGAATTCAAA TTAATGAAA TTACATATG AAAGGAAAAT CCATTGCTAT
TTCTGGAGAG GACCTCAGTC CTGGCTTTT CCGTGGCATT GCTACCTGGG TGGGTGCTCA CCACTCAGGT GCTGTGTG
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAAGG TAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC
CCGGGACTTA TGGTTAGCCG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCTCAGACT GCTCTTCTC ATTTTGTCT
GATGAGATAT TGACAGTCAT GTCCACCGC TTCTCATCC ATTTCCCGTC TTGGGGCCCT GGAAGTACG GGGGCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGTATATAC CTTTAAAAGT AACTAATGCA ACTGCCAAN AGGGACAGTG TCAATATCAT TGINTTCATT AGAAGGACGG
CTGCCCCACA CTGTNAGAAC ACTGCTGTTC CTAACAGTAG TTTACTTTNA GAGGGATGTA AGAATTAGTT TNACCTAAT
TCCAGATGIG CATGCCCTAA AAGAAAAATC CCATTCTCTT TCCTTTTGGG GAGCACTTTT GGTGGCACCA AGGCTGGTGT
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGACTTGGGC
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTCTCCC AAAGTGCTGG GATTATAGGC GTGAGCAGT GCGCCAGCC TTAATTATTT TTAAATCAGA TTTTAAATC
AACTAAACA GCTATGAGTT AAGTACCTGC CCTGCAAAA TTTTAGAAA AAGTTTTAGG ATTATGAAAT TAAGAATTAT
TTTCTTAAC TGGAACAGTT CTAAATTTA TCTGATACTT CTCTAACAAG TGAGTGATCT CATGTAACCC CAGTTTGTAT

380

CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG
TTTTATAATT CTCATGTCTT GATCAGATCT GAAGGGAATA GGCATACCCT CC

SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTATT ATGTACAACA TGTATTTTGA GATATGTATA CATTGTGGAA TGTCTAAATT
GAGCTAACAA ATACATTATC TCACATACCA TGTTTTTTTG TGGTGACAAC ATTCAACAAT ATAGACCATT TCACAAATTT
GCATGTTATC TTTGTGCAGG GGCTATGCCA ATCTTCTCTG TATTTTINCA ATCTTGGTGT ATGTGCTGCT GAAGCACACA
CCCTAATTCC TTTCATTAA GGTCTAGTT AACCTTCTC TTAAGTATAA CCATGTATTT TGTTAAGCAA TATCTTTTTA
TTACAAAAT GCCATTTTT TCTGNTAGG AAAATTGATT

SEQ ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCGGC TGCCGATGTG GAAATTTGTT TTGTGGACTT CACCGTTACT CTGACAAGCA CAACTGTCCG
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGT TGTGTGGCT GAAAAAATTC AGAGAATATA
AATTACTTCT TGTGAAGAGA CTGAACTTT GTTTTATT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATGSC
CATTFTNCTT TGATGTCTC CAGAGTTTA CATTACACT GTCTGTCTTA TAATTGATAT TTTAGGGATG TTTGGGTGTT
TGTTACAGGC AGAATTGGAT AGATACAGCC CTACAAATGT ATATGCCCTC CCTGAAA

SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACITT ATTGGCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC
NCGGGCCTG CCCCAGACCC TGGTTCCCT GAGGACCAAC GTGAATGGGG GCCCCACTGG AAAGATGCTT GGGGCTGCAG
AGCGGATGGA ATGCAGGCC AGGTGCTGG GTGGTGCCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGGC CGCTGGGCTC
TGCCAGCCGA TGCTCNCCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA
GCACAGGTCT CCTTGACCGN CTGCTTTNAA GGGTGTGAAN CG

SEQ ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTGAAC TGGACATCCT AATGATGCAA TTACGTCATC ACCCAGCTGA TTCCGGGTGG TTGGCAAAT
CATCGTGTCT GTCCAGAGAG GCTCCACAAT GCCACCCGC ATGCCATTTC TGTAGTCTTC AGGGTCAGCT GTTGATAAAG
GGGCAGGCTT GCGTTATTGG CCTAGATTTT GCTGCAGATT AAATCCTTIG AGGATTCTCT TCTCTTTTAC CATTFTNCTG
CGTGTCTCA CTCTCTCTT CTCTCTCTAG CTTTTTAATT CATGAATATT TTGTTGCTG TCTCTCTCTC TCTCTGTGTT
TCCTCCAGCC CTGTCTCGG AGACGGTGT TTCTTCCCTT GCCATTATC TTTTCAACTC CCAGGGCTAC CCATTTCAAT
GGTGGGTGCT T

SEQ ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTACGCT TTACAAAAG CAGATTTGGT ATTCAAGAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAG
CTGTAAACAC GTTTGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGGAAAG
GTGACAGAAA AGGAGAGGGA AGGATGNGA CAGACATCAC CTGTGCTCTC TAAGGGGGCC NTGTGTTTAA TTTATAAGGT
TTNCTNCCCA CAGGAGTTCT NNTGTGATCT ATCCGTTCAAT

SEQ ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTTCTTCAT TTACAAGAGG AATATATTG GCCTCTCTCT TAAGACTCTG AGATTCAACA TCAGCAGCTC TAAAAATAA
AGGAGCAGTT TGGCTCCGG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGACAA CAAGAAAACA TCGCTGGGGC
CCCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTTGA GGATGCCACC CCCACCCCAT CCTCTGTCA GGCCCTCGGG

381

GTACCCAGAG GCTTNGTGGG TGAGTATTCC ACCTGCTTAC ACACCACTGA AGCCACAGCC AGCCAGTAAC TAAGGGGCAA
GAAAGAGCAT TGTCCAAGCT GGCTCTTNG GGGGGTCCCC CATNGGCCA CAAAGGCCTC ACCCCCCACC CCATCCCCGT
AACCAGAAAC CACCTTGA

SEQ ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTTTATATG TTTATTTACT TATTTTTTAC CCTTTTTTCA AGAGATGGGG TCTCACAGTG TTGCCCAGGC TGGACTTGAA
CTCCCACTCC TGGGCTCCAG CAGTCTCCT GCCTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCC
GCAATATTTT AATTTCIGTA ATGTGTCATT TAGCCAGTGA TTGTTGTATT ATAATAGAAT CACAGAAATG GAGGGACTCC
TAGAGGTAAT CAAATCTGGT GGTMTTAAAG CCTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT
CCCAATTATG TAAGCCAGRG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

SEQ ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGTACATGIG CACAACGNG GNGTTTGTGA CATATGTATA CATATGCCAT GTTAGTGTC TGCACCCATT AACTGTCAT
TTAGCATTAG GTATATCTCC TAATGCTATC CCTCCTCCCT CCCCCTACGC CACAACAGTC CCTGGTGTGT GATGTTCCCC
TTCTGTGTC CATGTGTTCT CATATTCAA TTCCCACTA CGAGTGAGAA CATGCTGTGT TTGGTTTTTT GTCTTGCGA
TAGCCAGATG CAGCTACTCT TAATGTGCAT ATTTTCATCC TAGAACATTG GAGAGTCTCT GTAAAAGCCT TGTGTTCCAG
GAGGAAGGAG ATCCTGACCC TTCTGCTGAT GGCAGCAGTC AGGGG

SEQ ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAAT CTCTTATAT GAGAACATTA TTAAATTCCA TTGCTCATGG
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCTCTCA GTATCTCCAG TTAAAACTT
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAAATCA GGCTACTAAT CCTGTGCTT ATATAGATGA AGACCAATTG
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACT ATAAGGCTA
TTTGCTCAG GGGCCTGGGA AAACATTCAG GACCCAGGGA ACCTCATGCC CTCTTTTATG GTTCAATCAG ACAAGCT

SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GTCTAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCACTT GGCTTCTACC ACGTCCAGTA
CATGCGAGTG GAGGTGACCA AGTCTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC
AGCAGCACC GTTCCGNCCT CTCTGCAAGG ACGTGCTCAG CCCCCTNAGG CCTCGGCGC GTCACTTCCC TCGGGTATG
CCACT

SEQ ID NO:1702: (Length of Sequence = 349 Nucleotides)

ATCTGTGTC AGCAGATTT TATTGCTGT GGAATCCATG AGAGCCGGAA GCATCGTTGG GGCCGTGGCT AGCAGAGCTC
ATGGTGACCA GTCCTGGGCC TGACCAATGG GTGATTACAT TAAAAACCA AAACAAACA AAACAAATA CCAAGAACAG
ATCACTTGCC ATGGACATCA GAAATCTATT GGTAAATGGT AAAATTTTAT GAAAATTTCC CCTAAACCAT AACAAAACT
GTCCTCTTA CCCCAAAAGT GCTGGAGGGA AAGATGGTGT CATGCTTTG ACCTCTCTTT GAACCTGAAA TGCTACCTTC
CTACCCGGAA AATGCGGCAC ACTTACTT

SEQ ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCCGTC CCTCCAGAAG CTCACATCCT CCTACTCATG CGAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT
GTGGCAGCAG ATGTAGTATG CAGTGACAGG GTGGCCATGG TTGCAAGGGC AAGGAGGGCT TCCTAGCATG GGCGTTATTT
GACCAGAGGC TGGCGGTGGC TTTTGCTAGC AGTGTGATTG TATCTGAGC CAGGGACAGA TACCTCTNIG AGCCTTGTT

382

TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAST AACASATGTT
GCTTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTCAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC
AAGCAAGTTC ACCTAGAGG

SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GGCCGCTCAG CGCCAGGNTC GCCTCACAGT
GGGGGTGTAC GAGTCGCCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTTGCCCAIT AACGAGGAGG
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCAGTCTT TC

SEQ ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCITAT TTAGTCCATT TGGTGAGGTA ATGTTTCTT GGATGTCCCTT GATGCTGTGA GACATTTGTT GATACCTGGG
CATTAAAGNG TTAGGTATTT ATTCCAGTCT TCACAGTATA GGCTTGTTTT TAGCCATCCT TTTTGAGAGG ACTTTCCAAG
AATTCAAAAG GGATTGAGTG TTGTGACCTA AGCCTATGGT CACTGCAGCC ATTTTCAGCAC TAGAGAGTGC CCTAAGCCCC
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATTT TGGGAAAATA AGGGAGAATT CCCTGGGGTT
ACCAGGTAAA AAGTCTCTCC CACTTCCTTC TCTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG
GGGAGGGATA AGGCGGTCAC TCTAAT

SEQ ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTTTATTTT CTTACATCGA AGAAAATGTT AAAGAGTATC TNCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGT
CAGTCTTTTG AGGAAACAGG CTGAAGAGGA CGCCACCTG GATGGGGCTG TTCTATCCC TGCAGCATCT GGGAAATGGAG
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGTTCGAAA GACCACTGCA
CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTCTTTTG CAGATGTAGT
TCCAGCAGTC AGGAAGTGGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTGAGGCA CAGAACTGT
TATTCGGGCA TT

SEQ ID NO:1707: (Length of Sequence = 434 Nucleotides)

GTGTGTCTGC AAAAAAAAAA AAGATTCTAG GCATGGTGGT GTGTGACTG TAGTTCCAGC TACTCCAGAG GCTGAGGTGG
GAGGATTGGT TGAGCCTGGG TGGATGAGGC TGCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA
GAAAGGAAAG AAATCACTGG CTCTTCTGTA AAAAAATGATC TGTTAAGAGT AATTGAAAAA ATAAATACAA GTAATAAAT
AATCTTTTCA TTAAGAAATA CTACCAAAT TAACATGGAG ATCTAGCAAA AAGTCAAAG CAGCTNGGCG TGGTGGCTCA
CACCTGTAAT CCTACACCT TGGGGAGGCT GAGGCGGGAG GNTCGCCTGA GGTCAAGAGT TCGAGACCAG CCTGGCCAAC
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGGAC TCCAGCACCT TCCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG
AGGGACTGGT GGAAGGCGAG GATTATGTGC TGCTCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTGAA GTGTACCCAG TAGAACTGCT
GCTTGTCCGG CACAATGATT TGGGCAAATC TCACACTGTT CAGTTCAGCC ATACCGATT TATTGGCCTA GTATTGCGCA
CAGCTCGGGA GCGGTTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGAACT CAGAAGGCTC TTTGGATAGG
TTCGTATGAC ACACACATCA CGGTTCTCGA TGCGGCCCTT

383

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGCTTAT GTAGAATTGC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTTNAGAC CATTGGGCAG CTGCTTTGGA
 CACCTGGAGC CATTCTTTT ACAGATGAAG ATGCATTGTG TCATTGTCTC AGGATCCTCG TCCTGTTGCT TCTCTGGCCA
 CAAATTGTTT TTACCAAAG ATGATTTTAT TTCACTGTCT TTGAAAATCA TTCTTTATAG GTAGAATATG AAGATTCTCT
 GAAATGATT CAAAATGCCA AACTCAAACA CTATTGTCCG ATTTCTTTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT
 TGTMTGTGA TGTGGGGGCG TTCATCAGGG AGAGAATTG AGATAAGTAG GAATAGCAA TAGGAATAGT GAAATAACCT
 AGAT

SEQ ID NO:1710: (Length of Sequence = 187 Nucleotides)

GGTGATCTGC CGACCAGAGG CCTTAACTC TGGTGTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTCACTGTCC
 ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT
 TGGGCITCAG CCGACCTGCA CTCAGTG

SEQ ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGGCATGT NATCATTINA ATGATGINAT CTTTGGTGT TCCCTCATT GCTGTAGACT ATCCCTCTC CTCCCACCAC
 AATGTTTCTA TGATGAGTTA CAAACAGAAA GGAAATCACA TTTTCATACT AAAAACAAAA TGATCAGAGC CTTGATTTCT
 CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG
 GGAGTCTCCT CCCCTTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CACCCACAGG CGT

SEQ ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTTGGTGGT TTCTCTTTA TTGTGTGCTT CCTACCTTCC CCCACAATTT CAGTCCCTTC CAACACCCCA AAAAGAAGGA
 GTGAAAGGAA GGGATTGCTG GGGTTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC
 TGCATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCANTG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG
 GGACCTCGCT TTGAGTAGCA AGTGTTTAGG CCACTTACTA GCAGGAAC TA AGCAGTAT CCTACAACAG CAAATGTCIT
 TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCC
 AGTGGCACTC TGT

SEQ ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGTGCAGCTG CTTTGAAAAA TGACTTGGCA GCACCTCAA ATGTTAAACA GAGTTACCAC ATGACCCAGT AATTTACAC
 TTAAGGATAT ACTCAAGAGA AATGAAAAC AAAACATAC GGCTACCCAA AACTTTACAT AAGANTGTTT ACAGCAACAT
 TATTATAAT AACCAAAATA TGGNAACAAC CACAATGTCC ATCAATTGAT AAMTGGGTAA AGTCTGGCAA ACTCACAGRA
 TGGATATTA TTTGGTGGTA AAAAGGAGTA AAGAACTSN ATGTACTACA ACATGGGTG

SEQ ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTTTAC CGGGGCGTTC CTGAGTTTAT TTGGGGCACA CCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTTGGGCC
 TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GGCGCAGGAC CCGTGGGGC AGCGGGAAC TGATCTTGA GTGCTGGAAC
 TGCTTGACAG CCGGCCGGCG GCACTTGCTG GCGCGATCT CCTCCACCTT CATGATCTGA ATGGAGTGGG CTCGGGCGCG

384

GTGCGGGGCA CCCATGTCTC GGTAGCACTG GGTGACAGCG CCTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT
GGGTGCCCGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEQ ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TGCTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC
CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCTC GCCCGAACC CCTACTGTGC TTKGAGGGC TCCAGCTGCA
AGCACGTCAG CCTCTACCAG CCTCAGCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT
TNCAGCGCGT CTTGCGTTGT TTCCC

SEQ ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCGC AGCCCTCTGG CCCCCTCCAT CTCTTGTCGG TTCCCACCCA CCCCCTCCT CGGCCCGAGC CTTTTCGGG
TGGGTGTGAG GNTCACTCCC ACTAGGGACT CTGCGCTAAT TACCTGAGCG ACCAGGACTA CATTTCCTAA GAGGCTCTGC
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCCGCGGGG CCTGCTGGGA CTTGTAGTTG CCTAGACAGG GCACCACCT
GCACTTCCGG ACCCGCGCTG GAGGCGCGT GAGGTTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATGGAGA CTCACATGGC TGCAGAACAC TGTCAGGTGA CCTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGTTAAA
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTTGCTGTC TGCCAGCACT GTGATTAGA ACTTTCCTAT CTCAAACCTGA
AGGAACATGA AGATTATGT GTGCCCCGA CGGAACATATG TGGCAACTGT GGTGCAATG TCCTTGTGAA AGATCTGAAG
ACTCACCTG AAGTTTGTGG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGSATGAAT
CTTNGGGTCA GGATGGAATC TGGATTGCAT CCCAACTCCT CAGACAAAT GAGGCTCT

SEQ ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTGT TTTAATTAT TTAAGACCAC CTCCTTACAA CTTCAGAGA GAAATACAA AACAAGAAAC AGACTTGGTT
TCAAATGCAT AACCAGGTGC TGGAGTTTAA AGCATTACTG ATAACATTGT TACAGAAGAA TGGCAGCTTA CTCCAGGGCA
CTTCAGTATT CTGAGGAAT AAACATGATT TCGGAAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCGGGG CAGAGGGAGC ATGACGGGGG GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC
TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCITGGGG CTAKTCAGGA
AGAAAGGGAA AGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

SEQ ID NO:1721: (Length of Sequence = 326 Nucleotides)

GGTGCAGCGA TGTTAATGG CAATTCGTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CCGTGGAGCC GGCAGGAGGC
CCCCGCCGGG NTAGAGAACCC ACAAGCCCGG CCGTGCAGCC CTCCCGCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG
TATGTTACAG TATGTACAAG ACCCTCTCCC TCGGGGAGCG GGGCGGACTN CGCAACGNT TCCTATGTAC ACCACCTCCC
CTTTCGGCCC TGAGGTCACT GCCCAGAGTC GGGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAAACAT
GCGGAG

SEQ ID NO:1722: (Length of Sequence = 291 Nucleotides)

385

TGTTTTTAA AATGAGAAAA TTTGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT
 GGATATAATA TTTAGACTTT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAATT TACAATTGAC
 TTTTGTIATT CTCTTTNCTG TCATTACAAG AATGAGATGG AAACCAAAAT AGTTGGINCCA TCTCTTACC CAAAGAGGGA
 TACTGAAAAG TCCGGTATGT GCATGCACIT TTTTCTCTGG GGTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCGC TCCCTCGATT CCTTCTGTT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTTGTCTTAG
 CCGATTACC TTTGGATAAG ATTACCGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTTA TGGCATTGAA AAAGCTGTTG
 TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCACAG TGTCTTAGA TCGCCTTGCA GTGATATTTA GGCATACCAA
 TCCCATTTGTG GAAAATGGAC AGACTCATCC GTGTCAAGAA GTCATACAGG AAATAINGCC AGTTTTTATC CGAGGACTCT
 AAAATAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTCAGG

SEQ ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGTATGTGT AGTTCGATT CTTCAAATTT TATACATATT TACTTTCTGT TAAAGAGAAA AGGATAAAAT GGTATAAAAA
 AAGATAAAGC TATTAAATTA GCACGAGAGA GAAGATAAAT GGATATTTTC CCTGTGTGAG GCTAAGACAG AWGCAAATCT
 CGTTANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAAC AAAAGCAGTT ATAGANCCCC T

SEQ ID NO:1725: (Length of Sequence = 317 Nucleotides)

GTGCAGGGTA GGGTACATAT GGCTCTGTCA GAAGAATACC ATGATTIAAG GGAAGAAAGT ACACAAGGTA CATGGAGGGT
 ACACAGGGAA AGTACAT A TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT
 GCCTACCCAA ACACGCT A GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCCGAGAGC
 ACATGTKACT KAACATGAAG AAAGCATACG GGAAAAGCGT GTKTACACAT GNGCATGTTT AGTGGGGCAC ACGCAGG

SEQ ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCOGGA GTCCTGGGAA TCCAGGAAGT CGCAGAGCAG
 GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCGAKT TCGCGCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT
 GCACGAGCTC CATGAAGCCA CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA
 TCATCATGTC CTTGGACGTA GCGAGGTG AAGTGATAA TT

SEQ ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGTATTGAT TTCAGGCAGG ACCCAGGTCC CAAAATGTTA GAAACAGTTA TCCTTTTTCC CTCTGAGTTC GTTATCTCT
 GGGGCCCCAG TATCCGTGGC TTAACAACCC GGCTGGATAG AAGGCACCTC TTTCCCCAGS TTCCAACAAG ATCCCAGAGC
 TGCITCTCAT TGGCTCGTCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CCGAGTCATG
 TGCCCACCCC TGGGGATCCA GCTGTGGGNC TNCITTAACA GCATT

SEQ ID NO:1728: (Length of Sequence = 394 Nucleotides)

TTTTTTTGAT GAGGAGATAT AGCAAAGGGT CATTTGCCCC TCCTTCAGAA AACTTTTCTC CAAATCTCCT TTAAACATAC
 TGCCITATCT TTCCCTCCAT AACTCCACCA GTCTCTCCAC ATCCCCCTCC AAATCTCTGT ATACATAGGC AAGAGAGGGC
 GATTCCCAGC ACAAGTCTAG TCCITGGCGA AACTTCCATC TCITTCCTCG CATACCTCCT GTCTGGGTAT GGGGATAAGG
 GAGAGTATGG GATTTTGTTC TCCATTACAT GCTTTTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAAT CAGAACAGAC
 AAAATGATAT CCGGTAAAAC ATGCAACTGA GAGCAATTTG GGGAAAATC CTCAGGNCAC AAAATGTATT ACTG

386

SEQ ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAGTTAAA GTATTTATTG ATGIGTTTAA ACTGIGTACA TTCTCCACAG ATCATATTAA GNGTITTKTA GSKGAAGTTT
 AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGTCAAAG GGGAGGYAAA AGGAAAAAA CAAACAAAA ACAGTCACAG
 GAAAWTAAAA ATACACCMCA GGTACCAGA ACCTTCAGGT TTAAATATAA ANGNAAGNAA AAGCAGAAGC AGTGAGCATC
 GGCATCAACC TGTACAAGCA TTACAAAAGG CTCTGTGAC GGAAACACAA TTGTTCAAAG G

SEQ ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACGRACGCT CTGCCCAGC CCTGAGCGTG TACACATGAT GINTTCTATG CATTACCCCT GCCCCCAGC CCGCCCTGCA
 GAGGACAAGA TGGGTGGCCC CGGCTCCCTT TCCCCTAACC GCCCCTGCCC GCTGTGCAGC CGTGTGCGTT GCGGTGTGTT
 TCIGTGTAC TGGCGTGTCA CGTGATGTAG CCGTGTGTC TGACATGAGC CCCTGCCCC TTCTCTGTTT CTCCGTGTT
 TTCTAGAGCT CTCTCCCTCC CTTCTCAGA GGGGACAGGA CTCTGGGGT CTGGCTCGG CCCAGAGCCA GG

SEQ ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGTCCCGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GTTCAGTCCA TCGTGGGCTG
 CGTCATGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGGCGGGC CCAAGAAGCG GCGCAGACG TTGCTGTTC
 GCCACCAGC GGTATTTCG GTGCGGACG GCAAGCTCTG CCTCATGTG CGCGTGGCA ACCTGCGCA GAGCCACATT
 GTGGAGGCC ACGTGGGGC CCAGCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA
 CCTCAACGTG GGCTATGACA TCGGCCTGA CCGCATCTT CTGGTGTGC CCATCATCAT TTTCACGAG AT

SEQ ID NO:1732: (Length of Sequence = 352 Nucleotides)

GTACCTAGTA CTTAGATAA AGGGAAATGT GTGATCTTA ATGAGCTTTA AAAGGAAACA ACTTCTTTTT TTTTTTTTTT
 TTTTGTAGAC GGAGTCTCAT TTTGTCCCC CAGGCTGGAG TGCACTGGCG CGATCTCTGC TCACTGCAAG CTCGCCCTCC
 CGGGTTCAGC CCATTCTCT GCTCAGCCT CCCGAGTAGC TGGGACTACA GGCTCCACC ACCAGNTCG GCTAATTTTT
 TGTATTTTWA GTAGAGACGG GGTTCACCG TGGTTAGCCA GGATGGTGTG GATCTCTGA CCTCGGTGAT CCACCCACCT
 CGGNTCCAA AAGTGCTGGG GATTACAGG GT

SEQ ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTGTMT GTTGTGTGT TTGTTGCAG AGTCTGCTC TTGATCTATC TCCCAGGCTG AAGTACAGTA GTGTGATCTC
 GGCTTGCTGC ACCCTCTACC TCCCAGGTT CAGCAATTCT CATACCTCAG CCTCTGAGT AGCTAGAACC ATAGGCACAC
 GCCACCATAC CTGCTAACTT TNCIATTTTT AGCAGAGACT GGATTTTGCC ATGTTGGCCA GGCTGGTCTC GAACCTCTGG
 CCGCAACTGG ATCTGCCAA CTCAGCCTC CAAAGTCTG GGATTACAGG CATAAGCCAT TCATGTGCGG TTKTTCAACT
 G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGTCAACGT ATCTATTTTT ATATGAAAC ATTAATTTTT GACACATTGC CTCATTTGCT TTTTAAAT CTATTATCTG
 ACTTAAACCT ATTCAGCAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAACTAGGA ACATAATATG
 TTTTATGATA AACAATAATA CTAAATCTGA GTGTATGAA CTGTTAAC

SEQ ID NO:1735: (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATACGT TGGTGAGTTT CTAAGGGGGA AGCCGGCCAG GGAGCGAGCC CAGAACGGAC
 CGGACGCTG TNCACCCCA GCGCTGCCCC TTGGCCGAG AGGCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC
 AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGGAAACCCC CCCACCCCGC CTTGAGAGCC CTCCCCCTTG GACTAGAGCG

387

GCTGGGCAGA GCTCTAAACA GGGGCAGGG CTCCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCTGGAA GGGGCAGGAC
CTCCGGCCTT GTCCATTTCG GGGGGAA

SEQ ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCCTGTGTTGG GAATGGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG
CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCAGCAC TTTGGGAGGG
TGAGGCGGGC GGWTCACGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC CCGCCTCTAC TAAAAATACA
AAAATTAGCC AGGCATGGTG GTGGTGCGT GTAATCCAG CTACTCAAGA GCCTNAGGCA GGAGAATCAC GTGAACCTGG
GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ ID NO:1737: (Length of Sequence = 324 Nucleotides)

TGTTTTCTAA TGATTTTAA TTTTTCAGAG GAAAAATAATT TCAAGAAATA AAACCTAATT CCCCTGAGTC CTTATTGAAT
TAAATATGA AAAACAATGA ATGAATGATG CATCTTATT AATGGACTGT AAGAACTGA TATAATGGAC TTCACTCTAC
AATTCGGTTT CTTATTGCT TACACATGCT CCTCGAAGCTT AAACATTTTA GGACCTTAAC ACCATTTCCC TAGTACAATT
ACTAAAAGAA AGCTTTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGNN AGATGTGAGG
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GGCACCTGG GCATGTCAG CCTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCTGG AGCCGGCTGT
CGTGGATGCC TTTAATCAAG CTGGCATTT GTTGCTCAC GAATGTCCCA ACTACTTCCG CTAGGCCCAT CATGGCTCAG
GCTGCCAAG GCTTTTNTGT CACCTCTTTT GTTCTCTCAC ACTGACCACT CTTGGCCTTA AGCTGACTTA GAAGGGTTT
TCTGAATTGT CTAGATCCAT GCATTATTT TCTAGCTTCC TGCTTGCTC CCTATTCACT TTACTCTGT AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CTCAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA
CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA
GGCCTCGACC AGATTCAAGA CCAGCAGTTA AAAAAGAATC AACTTTGCCT CCCAGGACCT ATTGGAAAGA AGCTAGAGAG
AGAGATTGGT TTCCAGATCA AGGATACAGA GGTGAGGCC GAGGTGAATA TTAATCCAGA GGTGGAAGC TATAGAGGTT
CTTTATGGGA GGGGCGTGGC AGNGGGTTGG TAGGGGGACA CACTTCGAGA TTATCCTCAG TATANGGGC AATAAGCC

SEQ ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAATCA GGAAGAAAA
AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTTCAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA
AAAATACTCA ACATCCCTAA TTATGGGGA AATGCAAATC GAAACCACAA TGCAATACCA CTTTACTCCT GCAAGAATGG
CCATAATTTA AAATCAAAA AATAATAGAT GTTGGGTGG GATGTGTTGA AAAGGGAACC ACTTTTACAC TGCTAGTGGG
GATGNTAAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CAAATGCAA AATCAAGACT TGTATAAAN TGTATGTCCA TAGCCTATAC TGTTTAAATT ACTNTAACIN TATAGTAAGT
CTTGATGTTT AATACAGCAA ATGTTAAACC AAGCTTTTAC TACAGAAATA AACAGAAAT TATAGGCGCT CATATCCTT
TTAGACAAAG TTGTATTTGC TTGCTATTR TTTTGTITA GNTTTKTC AACTATTCA CAAACAGGNA CAWRATATT

388

TAAATTGTTA ATAGAARTTT CCAGTTTTCT TTAGTCTCTG GCTACTCCAA GTACTGGTTC CTGTGAATGA CCTTTTCATG
AG

SEQ ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCAGCC AGGAAAAAAA AAAAAGCTT TGAGGAATGA GAGAGGGTGA GATGGGTGGA AGAAGGTGCT GGGCAGCCAC
GGGCGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCCTGCTTGT ATCTGTAGT GAGGATGTTG GCTTTGCGCG
TNAAGTTTGA GAGCACAGTG TGCAGCCCCG GCAGGTGGTA GTGGAACATC TGTTCCAGGT CTTCTTCGCC GCGTCCGAA
CCCTCCAAGT GGGCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG
CG

SEQ ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGGTAGGG GGCCAACGCA GTCACGCGG TCCGAGTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGCCTAGAGC
CGCTTGCGC GAGAACACTG AATTGCCAAC GAGCAGGAGA GTCTCAAGGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA
GCACCCINAG CCATCGCGAG TTTCGGGGC CCAAGGCCAG GAGAAGCCG CCATCCGCA GGNCCNGTC TTTCAGCGAG
ACNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATTGAG TGTTCTTTA AAAATAAAAA CCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTCCGCCGA
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GGNGCAGGCA TGGCACCTTT CENACCGCAG AGCAAGCATA
GGCTGTA

SEQ ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTAAACCA GTTAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCACCAT GGCTGGCCCA TCTGAGAGCA
TCTCCCCACT CTCGCCAACC TATCGGGGCA TAGCCCGAGG ATGCCCCCAG GCGGCCAGG TTAGATGGT CCCTTTGGCT
TGTCAGTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTTGC
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CCGGNGCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTTCATGCTGT CCCTTCATTG AATTTTAGAA TGATTGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG
CTGTTTGCG AGATGAGGGC TCAAGATCTG GNTGCGATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT
TCAGAAGAAA TGCAATTTGC ACCTGGTGA CATATGGAAT GTCATAGAAG CATTGCGGGA AAATGCTCTG AACAACTGG
ACCCAAACAC TGAATCAAC GTGTCCGCT TAGAGGCTGT GCTCTCCACT ATTTTITACC CAGCTCAACA AACGGGNTGN
CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGN CTNCTNCTTA ACTNCTGCT TGCAGCGTTT TGATNCCGGA
AGGCCATGGT AAAATTTTCA GTATTGCTT GTCAAAANG GGTTTITAGG NCCATTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTTTAATA AGATACCACT GTCAAAATAC ATTTCTTAT AAAGTTAAGC TCCATACAG TTATAATGTT
GTCAGTAGGA ATTCGACAAT ATAATAACGT TCATGAAATC GTTACGTTGA CAGGTAGGGT TAATATGAAG CTTGGAATAT
TTTCCAGTGT TTTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

389

TTTACACGNC AGTAACCCCTT CAAGTTCTGC CACCCTGTGT GGGGGTAATG CCGTGCAGCT AAAAATATGG GTTTTACGNA
ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEQ ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCTGATTGGG TGAGTCCTAT TCATGTTATA AAAGGTACTC TGCTTTCCTT AACATTCCAT AAATTTTAAAT
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGTTTAA
CACATAAAAC ATCATCACAC TATGCTTCTC TTCTGTGTTT TTTGTACCA CGTATCTGTT CCATGTGTTT TNCCTTGTAT
ATATCCTATC CTGTCTATC TCTCCTATGG TTTTGTGGAA ACTATAAGCC TCTGGGGGG TAAACACTA TATCTTTGTT
CAATTGTTAA TACATCGNAT AGCATATCAT GCCTGGGGGC ATTGTTTAA CCCCCATTT AAATACAGCT NGGCAGCAGG
ATTTTAGGCA TTCCGTCATG GTGTGCCA

SEQ ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGTTTCACCA TGTTGGCCAG GTTGGTCTCA AACTCCTGAC CTCAGGTGAT CCACCTCAGC CTCCTAAAGT GCTGGGATTA
AAGGCGTGAG CACNCACAT CACACCTGGC CCTCAACCAT CTCCTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT
TTCTTTGAG ACTGAATCTT AAGTCAAAA CAATAAAAAA TTGCTAATCA TTAATATGAC TCCAGAGCTA CTTGCTTCTT
TAAATATCC TGAANTTATA AAATATAAAG CCAAAGCAAT GAATTTCTAA TGGTGGAAAT GTAGACACTG TGGGCCCCCT
GGGATGTTA TTTTCAGATG GGGCAAGGGG ATATTCTTAA CCTATTTTAA AAATCATGCC AGCCTAGATA ACTATGTGAA
AAATATATGG GGTGCTTAGC AAAACTATTA CCTAGCACCC CTTTGGCAGT TTAACATTAA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTTTAT TTCCAGGTG GCACGTGTAT AAGGCACAGG GGCAATGGC TTTGGGGTCC TGGAACTGGA AATGGAGACA
GGTGTGCTC AGGTGTCCTT GCCTCCACCA CCCCCTAAGT GCCTTGAGA CAGGACCACT GGTGGTGGTT CCAGCCCAGG
GTCCTGAAGG GTNCCACTGG CTCTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC
AGGAGGGACC CTNTCTCTT AGGGGGCGAG GCCAGCTCCA AAGTGCTTNG TGGCTCCCCA GGCTTAAGGG ACCAGCTGAC
CAGGGAGGGC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC
TNTGGGGGT ACTCGTCATG TGGGTAAATT GCCAANTTC

SEQ ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCTTTTT CACCAGGAGC TTTGGACCTG CGCAGGTTGT GGCATGTAAT
CACCCGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCTGGAAGG AATCTGTTTT CCACAATGAC
TCCCCCAGC TAATGTACAC ACTGGCATTT TGCTATGCTT CCTCACACAT GGGGCACCAG CCTTGCTTCA GAACCAACCA
AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTTTAAAGA AAGAGTTAAG GANGCAGCTT ACAAAGGGAC
AAGGCAAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGTT CCATTGGCAC CATAGTGAGC CATTCAATTG
CCCAGGAAG NNGGTGGGGG CTAAGGGGCT AGGTTTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAG GGAGGAGGGG
TCCCTAGAGG CTNGGTGCC ATTACATAGA CTCAAATTCG TCAATGCGCT GCTTTAG

SEQ ID NO:1753: (Length of Sequence = 402 Nucleotides)

390

AAATTTAACT TCAACAAGCT GGTGATGCCC AACTACCCAT TCATCAACAT TCGSTCAAGT GGTGTGGTTC CTCAGAGTGC
 ACCACCAAGT CCAACAGCCT CTTCCCGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG
 GACGGTTCTC TGCTAGCTCC CTAAGTCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTCAGAG
 CTGGAGGATG GCTCAGCTGC TGAATGGGCG CGGGGTGTGG ATCCCGTGTG CTCCAGGAAT GCCATTGGTG GAGGAGGGAT
 TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCTCTG TTTGCTAGGC CAGGGATGTA CCTGACCCC ACAGTCTTTC
 GT

SEQ ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCTA AAATGGAAAG GAGGAGTCTT GGATTCAGGC TACTGACTTA CTCTGTGAAT TTACACATAA
 CTTCTTTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA
 AATCTGAATT TGGATTTAGC AGAATTTTAT TTTTCCATT TCTATTTTCT ATGCTCACTA AATTGAAATT ACAACCATTG
 TAAATTTTGA TATCATTTAA TATGTAGGAC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAAATTA ATTGTNATTT
 TCACTGATGA GACTGAAATA CAATCAGTCT GTATGTGTG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

SEQ ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TTTTGCTTTT TGCAGTGTIT GTNCTCTTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG
 AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTNAGG GGTGCGTGGA GGAGAGGCCT GGGCTCTCT
 ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCCACTG ACTGAAAACA AGGACAGTCA GGGTGAAACT
 TCTTTTGCCA GAATGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGCAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC
 TCAATCTAG CTCTGACTTA GTCAAGGGG CCT

SEQ ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGGCTCGGA GCATCGAGCT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC
 CCTTCTTAG CCTCTGTTCC CTCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT
 TTGAATAAAA CACAAGCCTC CGTT

SEQ ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANCAACAC ACCTGAGCTA ACTTCCTGGC TTTTCAATCA AACCATCTTT GTCATTCTCT GTCCCCACCT
 GAAGTCAGAA AGCCTGAAGA GAAGACGGCT CTATTGCCNC AGCTGGAGTG TGGTGSCACA ATNTCAGCTC ACTGCAACCT
 CTGCTCTCTG GGTTCAGGCG ATTCTCCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC
 TACTTTTTCG TATTTTITAGT AGTAGAGATG GGGTTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCTGA CCTCGTGATC
 CACCTGCCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTATTTG
 GGCATTCCT TATTGAGATC TAGGG

SEQ ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGTTCCCAA AGTCCCATCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG
 GACTGGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCAC CCAATGTGTT
 TTTTAGTGAC AGGAAGAAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAA AACCCACCA GGAGCAGGGC
 AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CCTGTGAAGA ACTGTGCTGT TINTGTCAGG
 GAGAGGCCTG AGCCCTCTCA GAAGCAGGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGGG
 GAGCAGT

391

SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATATTTTT TTTGTTAAAT TTCTTTGTAT TTTTTCCTG CAAGACTTGG TGTTGGCGGC ACTGTTGTAG TTTAACTTCA
 ATCCCAAAT CCATGAAATA GAAATCAGAA GTAAAGGTTG AGAGGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA
 GAGTTTGA CT AGAAAAAAG AAGAGGGTAT GTGTGGTGGG CATTCTGGG CAAGGCCATT CCTTGAGGGA GGGGGTTGGC
 AGGCAGCTTG CCTCTGCCTC ATGCAGGGGA GGGAGGAAAG ATCCCCCTGGG GACCCTGCAG TCCCCTCTTC CTAGGGCTTC
 CTGCTCCCAG GGGAAAACT AATACCAGAG AGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CTGGCCGGGT CCAAGCTGGC CAAGAAGAGG GAGGAGGCCA TTGAGAAGGC CAAGCGCGAG GCTGAGCAGA
 AAGCCCGAGA GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGGGAGG AGAGCAAGAG CGAGAGCNTG AGGCAGAGCG
 GGCGGCTAAG GCGTCCAGCT CAGCGCATGA AGGTGCGCTC ANTGACCCAC AGCTCAGTGG TCCTGGCCAC ATGCGGCCAT
 CCTTCGAGCC ACCACCAACC ACCATTGCTG CTGTGCCCC CTACATCGGG CCGACACAC CTGCCCTTCG GACTCTGAGC
 GAGTACGCCC GGCCCCACGT CATGTGCCCC ACCAACCGNA ACCAACCCCT CTACATGCCC TTAACCCAGC GACCC

SEQ ID NO:1761: (Length of Sequence = 378 Nucleotides)

CCCACCAGAG CATTTCACAA AGGCTTACCA CACAGGCCCC AGTACCTTTC TACTCTACAA TGAGGCTCAG AAGCTCAGTG
 TACCACCCCA TCCCAGGAG GCCCACTTAG ACCAGAAATC CCAAGTCCAT TAGCTACAGG CTGATATTCA GGGACATCGG
 TGTAAACAAA GAAGTGGGAT ATGAATATA TCCCTGATT TTTTTCTTT TTTTTTTTT TTTTGGAGAC TAAGTCTCAC
 TCTGTCCCC CAGGCTGGAG TGCAATGGG CGATCTTGGC TCACTGCAAC CTCCGACTCT CAGGTTCAGG AGATTCTCTT
 GCCTCAGCCT CCTAACTGGG GTAAACAGACA CCTGCTACCA TGCCCGGCTC ATTTTTTTT

SEQ ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGTTCAA AAAATCTTT TAATAGAAGC TATAAAATAG CAGATAAGCT AAGTCATTCT CATAAACAC
 CATTGTGCT TGAATGCGT GCATTGTGGC CTGTTACTTT TAACIAGTCT CACTAATTTA TAGTTATATA TGATGTAGAT
 CTAGATTGTG ATGTACACTA AGTGGGTGTA TCCYGAGATC AAGCTATGAT TGCTGCTTGC GTAAAGTGTT CCYTTTGGGA
 AATAAATAAT CTTCATATC TGTAACTTT GGTATAATG GTTATTTATG CAATGTATTG TTGTGGTTGT CAACTCAAGA
 TTGTATTCTC ATCTGGGGAC ATTATGAATC T

SEQ ID NO:1763: (Length of Sequence = 157 Nucleotides)

GTGTWTACTT AGTGTGTAAA GTGAACAAGA AAAGCAGCAT AATAAAGGAG CTGTGTTTTT ATCAGAGGAG CCTTCCTTCT
 GAGTTTTTAC ATAAGTTGAT GCCTTCAC TG CAACTTTGAA TACAGTGCTT TGAATGTGTA AACACTTGAA TAAATG

SEQ ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCTGC CTTCAACTCC TCCAGCTTCT NACCACTTGG CAACGCACCA CTGCCAGTTC CTCTGGGGCT CTCAGAATCA
 CTGGAGTACT TCTGCAGCTC TCTTGGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTC
 TTTATTTCTT CCCCTCCTTC TCCCTGGTGT ATTINTCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA
 TTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCCTG ATACAGAGTT GGCTGCGAGG GAGCAGCTTT
 T

SEQ ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCAGCCTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACCT GAGGTGTGGA GTTCGGGACC AGCCTGCCCA
 GCGCGGAGAA AACCCGTCTC TACAAAAAT TTTAAACTT AGCCAGGCGT GGTGGCGCAT GCTGCAGTTC CAGCTACTCG

392

GGAGGCCAAG GCTGCASTGG GCTGTGATTG TNCCACTGCA CTCCAGCCCA AGTGACAGAG CAAGACTCTA TCTCAAAAAT
 CAAACAACAA CAACAACAAA ACACCACATA CACACACACA ATGAGGGTAA ACAAATAAG TATGTGTGGG TCACACTTCA
 GCAGGGGTG CTGGTTTGCC AGAGGAAAGT GCAATTATTT TATCTATGGG TGTATTATGT CTCCACTCTA AACTGTCACT
 TACAGATGGC AAGACTGTTT

SEQ ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAATACT AAGACACTAA ATGCGTATTT TAAATTTGCC CATTAGTTT TGGGCTGCGT AAGAAATTAG TAAAAAATAT
 TTCCAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA
 GCTGGATTTC GTTGATCTG AATGGCTCAG ATTATGTTCC TTCCAAAAA GTTATTTTAT GTACGATCAT TTTTATATG
 ANGCAATGA AAAATCACCC AGAATCTACC ACGTATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA
 CCATGTTATT CTTTTATGC AACAGAATGC AGTGTGTGA GAAGTACATC AAG

SEQ ID NO:1767: (Length of Sequence = 330 Nucleotides)

GGTGACATG GCGGCANAGC AGCAGCATGG TGGCAGCCAC CAGTGGGCGT GGGGCCCCCG GGGGAGAGGA TGCCCCAGAG
 GTGCATGAGC AGACCTCGTA ACCGTCCTCC GAGCGGCTCT GGTCAATGTTG TCCTGGAGGG GCGCGGGGCC CCTCTGCCGC
 GTCCACGCCC GCAGCCACAG ATCCATCGGC CTGTGAGTCT CCACACACCA GCCAGTCCCG GGCGGTGGAC TGTGGGTACC
 CGGGTGCCAC CTCCAGCTCG CCATCCAGCA CTTTCCAGTA CTCTGGCCA CGGAAGAAGT AGGAGGCACC GTNGGACCAG
 CGCATGGCGT

SEQ ID NO:1768: (Length of Sequence = 361 Nucleotides)

AAC TGAAAAA CCAAGACTGG TAGACTCTCT TTTCTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGSA
 ACACCTATCT TTTCTTCGGA GGACACTAAG TTCTATTGA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA
 AGGAGTCGCT ACCGTGATTT GGTGACAGTT CTTCAAAAG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCCTGAAC
 TTTTGGGTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCTG GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG
 GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

SEQ ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACCGC AGCGCCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGGT TTTCTTATGA CACTTTTGTG GATTATGATG
 TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATCGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT
 CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA
 TGAGCCATGG CATTGGGACA GGGTCAC TTCAGAGGGA AGTGGGTCCC CAGGTGAGCC CTTCTCTTCC CTTTGGGCTC
 TTGCCAAAGN TGTCTTCCCC TACTGTAAAN CTGTGTTGTC ACACGGTCCA GTTCGTATTG GGTCTCGG

SEQ ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCACTTTAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCTTCCC TCTCTCTTC CCCCTTGTCC CAGCCTCAAC
 TGA CTCTGGC TGTGGGAGGT GTGGAGGCTC CTAGGCTTC CCTCCCCAAC CTGGCTTCCA CCAACACCCC TAACAGGAGG
 CCCGTGGAAG GCTCAGCCTC TCCTCCGCAT CCTCTCTCT TCTGCTTAT CCGAGGAGC CAGGGTCCCC TAGGCTGACC
 CTGAATCCTC TTCTCTCTT CATGGGAGGG GGGCAGGAAT CCAGAGGAGG ATGAAGCCAG CCGGACCACA TGGCTTNGTG
 GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCNC GGCCTCAGAG GATTGCAACC CTGTGGGCA CAGA

SEQ ID NO:1771: (Length of Sequence = 373 Nucleotides)

393

CAGAAAAGGC AAAGTTTATT CCAGTGTGA CAGAGAGAGG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT
 TCACCTAAGA GGTAAAGANCC GGCTGTAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTACGG
 CTCAGGCCTT CTCAGACTTT CCCTGGGACA CACGGCTCTC TGGGGGGGCC CGGCGAAACC ACTCGGACCA GGAGCCATCG
 TACACGGCCA CATCAGGCCT NCCGAGAGG TAGGCAGCCA AGGNCACGTG GCAGGCGGTG ACTCCCTTGC GGCACGTGGC
 AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGCTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTTGTCCCG TTCTGCAGGA GGGAGACTGA
 GGCTCGGAGG TTCAGGGCCT GCTTGGCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTCCCCCTCC
 CACTCCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTNGGGAGCA AGGAGGGCTC
 AAAGAGATGG AGATAGGCT GTTGTGAGGC CAAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCAA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATTG
 TCTAAGAAAT ATAGAGTGAA TTTTGCCCAA AGGCCCTCAC TGAATAATT CCTGAACCAA AAGAGTATTT CTAAATCCAA
 AACTTTACAG TATTAGACCT ACGAATCTG ATGATGCTG ATCAGATGCT AGTGTCTC GACAATCCAT GCAGTTTCC
 AGTATGAAG AAAGTAACAA ATATACCATG GTTATCTTA TTTCTTCTG AAAAATATCT AGGATATTTT ATAGTGTAT
 GTGGTAAAT ATTCATTGA CANTACAAT GAAGTATAAT CAGAAGTATT AGCAATTTTA CTTTGTATTAT CCGTTAATC
 C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCTGTAAAA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACTTTG CCAAAATAAA GTTTCAGCTG
 AAGGTAATGC TAGTTATAAA TTAAATACAA TTCTATTAG NNCTTGCAA AGTCAAAGGA AGACGGNAAA CTCCCTCTTT
 TGGCAATCA AAGGCAAAGA CCTGTTTATT TATCTTAAT TTNCTTTAT ACAATCAITA TCCCCACAG

SEQ ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTGAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAGC AATGGCAACA AAAGCCGAAA TTGACAAATG
 GGATCTAATT CAACTAAAGA GCTTCTGCAC ATTAAAAGAA ATTACCATCA GAGTGAACAG GCAACTACA GAAAATCTAC
 CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTAAAGACT TTTCCGGCA TCTTGAAAAA AACCACCAT
 ATTTGACATA GGTAAGACTG AAAAAACAAA CTATTCATAA TTACAATTG TGACACATTA TGTAGTAGCT AGGTTTCATCA
 CATAAATTAC ATGNTACCCC AGTTCAAGTT AAATTTGAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACTNCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA
 ACTCCCCCA AAATTTTAA TTTGGTTTGC ATTCTTTGA TTATGTTTGN GGTGATTGA GACTTGAGGC TGGCACTGGA
 GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTGCTGGG GAGTGACCAA GTGCATCAGG GGGTGCAGAT GCCCTATTCT
 GGCTCTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCCTGGNGAG
 ATAGATGTCA CTGGAATGGN CTTTNTCCAA GTGAAAGGCC ATCTTGTGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCAGAGC TGCAGGCATC
 AGCCGGAAC TCCAGGCTGC TCATGGTCAC TGGCGGTGCT GAACTGTCTC TCCACTTTNT TTTGGTCTT GATCTTGAGT

394

CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACCG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT
GCACCACTCG GTGTGACCG TGCCGCCGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTGCTCTG
CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

SEQ ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCAACT AGAAGAATAC AATTAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAAATTA AAATCACTT
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG
GAACATACAG ATTCACTGGT GAAAGTAAAT GTACACAAA CCTTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

SEQ ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG AACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTCAGAA
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG
NGGAAAGCAA TGAGCTCCAC CCTAYTCAGC AGA

SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA
TCTGTTCAAC TGTGGGTTTG ACCGGCAAGC CATTGGTTGG AACATCAACA TCCTGCATT GCTACAAGAA AAATAAGGAC
ACCGGCAGCC CTTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TGCGTATTAA TCAGCCATTT
TTGTGAGAGT TTGACCCCTGG AAAGGGTGCT TTGTATATGT TCTTTTCACA TAGTGCCAG CTGTCATGAA ATGTACAGAG
AAATGTGTGG TCGTATTTT TACTTTTGTG TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAAGCTC
ACCTCCCATG TAGCACATGA AAATGCTT

SEQ ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCTCAGATT GTGAAGGGCT CTGTAGGCTA TGTTAAGGAC ACTAGAAATC TATTGAAAGG TTTTAAGCAG AGAATTGACT
TGCTCATATT TTTCCTCAA AAAGCTCAAT AGCTACAAAA CCGTCAATAG ATGGTAGCTT TGTGGGGCTG GGGTGAATGC
AATGATATTG CAAAACAAGA TATAGGGAGA CAAGAACTTT TAATAACCTA AACCAGTGGT TCTCAAATTT TCCATGCATC
AGAATCACCT GGATGACTTG CGAAAACACA AATAATCAGA CTTAATCCCT ACATTTTCTG ATTTAGCAGG TATAGAATGA
GGTTTAAGAA TTTCTAACAA GTTCCAGAT GCGTAAAGT GTCTCTCAGG GTTTTACTT GAGCAACTGG GTGGATCCNG
TGGATCTTAT GTCCCTNCGA GTAAGGGGTC AGGTACAGCA TTCTCCGGTC AGATTGTTT

SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAAGAGGG ACTGTCCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCITCTCCT
GCTGCACACC CAGCAGCCAT CTATGGCTG ATTTGGAGAA TTTCTGGTCA AACCGGTGAG TATGAGGAGA GCAGGGCAGT
TGGGAGAGA GGTCCAGCC CAATTCTGCC CAGAGAAGCT CCCAAAGAG AGGGAAGTGT CTTGATGAG AGCCCATGAA
AGGGGTGAGA CCCAGGAGGC TGTGGAGATT GCTGCGGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG
GGGTCCCTT AGTCTACTG AAGTTCTGT AACTINGGAT TGGGGCCAGG TCANCTCCT CTGATACCCG AGCTACAMAT
CTGGCTTCCC AMTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)

395

AGAGCTTAGC ATGCTGTGG TTCAATTTTT TATGTGTTTA TTTCACATTG ACTTTTGCCG TGAGCTTTGA GGGAGACAAC
 ACCATCACAT ATGTGTAAAT TGTAAAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCATTT TCTTACTGGC CATGATGAAG
 AAAGCTGTAT CGTAGGAAAA TTACTAGGTA ATTTTACTCA CTGTATAAAG TTAATTTGCA AGGTATCATT CGATTGGTAG
 AGTTACCAA ATGAGAGTTA AAGAAACAGA AATATGGTTT CAGTTTATGG TGCATTCTTA TCTTTTTTAC TGAGTCTATT
 TCTGTCTGGT TGCTTCACTT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA
 TGGGGTGATT TAAGTAGGAG CCGGGT

SEQ ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAG AAAGTAGATT ACCAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT
 CACCCAGAAA AAAATAAGAA AGATAAAGA TGTGTGTAAG ATAACATAAG AATAAAATA TAGGGGAAAA GGTAGCCAAG
 GGATAGATAT TGATATTCAT TTTCTTTTAA CAACTTTTAT AAGTTGTAAAT TTGTGTGCAA CAGATTGCAT ATATTGGANG
 TATATAACTT GACTAATTTT GACAAATATA TACACCCATG AAACATCCAG TTATAATTTT AAACATTTTC ATGGCCCTCC
 AAAGTTTCCT TGTTTCCTTT TGCAATACAC GCAACACAC ACACCCACA CACAGTATGT AGGGCAACCA TTGATCTGCC
 TTCTGTTACA ATAGGGTAGG TTTCATC

SEQ ID NO:1785: (Length of Sequence = 414 Nucleotides)

GTAAACAGAT TACATTTGAA CACCTAAATA AGTATTTGTT TCATAATCAT TACATGCTTG TTTATGATTT ACAAAGATTT
 GGTAGAGAAA AGTACAGTCC TTAAGGCATA TATATGCCAA TGCAATTAAC TACTCAGCTT TTGTGCCAGC TCAGGTGTTT
 ATAGGAACAG GAATGTGGAA TACCAGCTTT TTAATTTAAT TATACTTTTA TGCTGAATTT TTCTTCCAGT TAAACCTTTA
 ATTACACTAG TATGTAAAGT AGTTACTGAG AAAAATAAGT TTTTGATTTT CCTTCTGTTG GATCTGTAAC ATTTTAAAT
 GGAGCTATTT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TTTAATTTTA NGAAACACAA ACCTGGGTCA
 CAAACATCT TCAG

SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GTTATTCCAA CCAAAATTTT CTAAGATTGA AATGCAGAAA CTTACAGAAT TGAGTAAAAA GACAAAAACG TAAATACTAA
 ATATTGAAAA GATGCAAGTN CCCCCAAT AACTTCATAG ATTTAATAAA ATTCAAATTT AAAGGCAATT AATTAGGGAT
 GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGTC TGGAAAAATC AATGGGTGAA ACGAAAAATAT TTTAGGATAA
 GATTAAATGAG AAGTAAATTT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN
 ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTTN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAAAG

SEQ ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCACAATT GACAATATAT ATGCATGTGT TTAAACCAA TCCAGAAAGC TTAACAATA GAGCTGCATA ATAGTATTTA
 TTAAAGAATC ACAACTGTAA ACATGAGAAT AACTTAAGN TTCTAGTTTA GTTTTTTGTA ATTGCAAATT ATATTTTINC
 TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTTAAGC ACTCACGCAA AGGTAAATGC
 ACACGTTTAA AATGTGTGTG TTGCTAATTT TTCCATAAG ANTGTGTAAC ATTGAAGTGA ACAAATTACC TATAATGGAT
 TTGGGTAAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTTTTATA TAATATCCAG ANGCTATCA
 CACTTGTG

SEQ ID NO:1788: (Length of Sequence = 391 Nucleotides)

CAACTTGGAA CAACTTTTAA TTTTGAATGC TGGTCTGATC AGTCCACGGC CAGGGGTAGG TGGTAACTAG AAACAGCTGG
 AAGGAGGGAA GGAGAGGGGA CCAGCAGTCC GCAAGCAGGA GGAAAGGAAA GGGTTGGGGA CAGGAGGAGG CAAGGCTGAG
 GAAGGACCCA GCCAGCTGGG TGTCTGCCCC GGCTAGAGAA CGAACCACCC CCACCCACCA GGCTACCCTC CATCTGTGGC

396

TTCAGTGCAG AAGTCAGTCC AGGTGGGTTT AGGCCCATGC CACCTTCTCT GGCTGCACA GTCCACCCC AGSCAAGGGG
TTCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCTNGG AAGTGTCCTT TTCAACTAAA CCCCTGGCCT T

SEQ ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTG AGGAGGCCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT
ATATTTCAAT CATTTATATT ATTTTITTTAA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC
TCTAGATTAA GCAACAAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

SEQ ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGTTTCCYTC ATTAGCTGTA GACTATCCCC TCTCCTCCCA CCACAWTGT TCTWTGATEA KTTACAAACA GAAAGGAAAT
CACATTTTCA TACTAAAAAC AAAATGWTCA GAGCCTTGAT TTYTCCACTA GAWACTACAC GTACAGTTAA GAGTCCACAT
GCAACACCTT AAWTCACAGA CTGAGACCTC ACATTYTGAC CTGGAGNTTC CTCCCCTTCC CCAGCCTTGG GCTAGCTTTG
GCCTAGGCTC AKGTAATACT GACACCCACA GGCCTGCTC T

SEQ ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAAGCA GAAAGGTGTG TTTGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTTTTCCA ATGGAAAYT
CACGGCCCAG TCCCACAGGA ACTTTGCGGC ATACCAAAACA ACAWTGAGGA AGGAAGGGCC GGGTGGCTCT ACCAAACAKT
TCAGGTCCAC TGGGTGAWTG A

SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTTT ATCGGCTGTA TAAACATCTC TGCTCTGTAC ATACATTTCA TACATCGTAG GGTGGGAAGC GAGGGCCAAA
GGGAGGCCCA GCAGCACAAC AGCTACCCCG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AACCAAGGCC AACAGCTCCT
GCTGCCTCTT CCTCCCTGGA AAAGTCACTG TTATGGGGAG GGGGCCAGGG GTTGAAGGAT TAGAAGGAGA TAGAGGGCTT
GGTGGGGAGG CCACATNTAA GTCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT
GGGC

SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTCTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA
GGCAGCCCTT CGGGTGAGGG CCTGGGCCCTC GAGGGATGGC AGCCACCACT GCCTAGGCAA ACGCACTGG GGCTGAACIT
GGCGCCCGGC ACTTINAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGST GACCTGGGTC
AGAAGGACCT TTCAGAATGA NTGTGTCCTG TCAGCAGATA CGTCAAGAC ACGGCTGGCT CTGAGAGGGG CTGGGTGCCC
GTTTTCCTG TATTCTCCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGGTCCCCG GGGTCA

SEQ ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAACATGC AAATTGGGCC GGGCAGAGTG GCTCATGCCT GTAATCCCAG CACTTTGGGA GGCCGAAGTG
GGTGGGTAC CTGAGGTCAG GAGTTCAAGA CCAGCCTGGC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAAT
TGGCCAGGCG TGGTGGCATG TGCTGTAAAT TCAGCTACT CGGGAGGTTG AGGCGGGAGA GTTGTGTTGAA CCCGGGAGGT
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACTCCAG CCTGGGGTGA CAGAGCGAGA CTCTGTCT

SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

397

GAAACGCTAA GGTTTTGACA GCGTTACAGT GAATTCCTCG GCTGTAGAGA TTGGAGGAAG TCGGGAGAAA TTCGTCTCTA
 AGTTGTAAGG TGGAACAGCA TTCATTTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAACCTAGT AAAAAGATTG
 GGCTTTTTTT TTTTAACTTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACTC TCTACCCCTC
 CCTCCAACAA AATAACCTAT CGGNTCTCAG AAAATAATAA CCGTTTGCTT GCCTTTGAAA TAGTTATCCT TTTTAGTATG
 ACAGTGTTC AAAATTCTTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTTGTTC
 TAAGACGAGG GGGACTCC

SEQ ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTTTATTACA TATGCAACCT TGCCATGCCT GCCAGTTAAC TCCCCTCCCG CCAATGTTAT CCTCATGATA TCAGCTCCCT
 CTTGGGGCCA CTGAGCTGCC CCCCTTTCTT TCTGGGCTGG AGTAGTGGTG CCCCTCAAGC AGGCAATGGG CAGGGGGAGA
 TCCACAATT ATCGTGCGAG TTCTCTTAAA AGTATTAAACA CTAAATAAG CACTCTTGGG GAGTTGCAA GGATATTGAG
 GATGGGATGC AGTGGGAGGC TACCCCTCAT CCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCTCAG
 AAGGTGAAGA GGGACCTAT TCTGGGCTT AGTGTGGTG GGCATATCC TCCCCTAACT TGTCTGTGG GCGATGTTCT
 TCACATCTAG GAGAGC

SEQ ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGAATCAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTGATC
 CAATCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAATA ATGATAGTNT CAGGGGTCC ATGTAGCAAT
 CCAAGCAATT CCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAA GAATGTGCTC CTAGTAAGAA
 GCAACTCTNT TCCACTCACT TCCTTTTGCT CTNTGGCAGG CAAGTCACT GGGTTCTC

SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CTGGTCCATT TTTACAACAN ATACATCCAA AACACTATAT AATANNPTTT TTTACAACAT TTCCAAATGA GAAGATTGCT
 TTINCCCCCA CTACTGCTAT TCACACACAG TACTTCCAG GCACAATACA TTAGGAGATC TAAANITGCT CACCTGTAC
 TCTAGGCTGC TTAGGAAATG TGAAAACITAG NAACATTIAT AATGGCATT GCTCCTTTCA ATACAAGGCA ACATTTTAGN
 AACCT

SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGTTAG GCTAGTTAGA AGGACACGGC AATAGCCTTG AGATTYTCAA CCAGGTTAGT GTATTAGAWG TAAAAAGGAG
 AGGAAAGATT TGAGAGTTAT CTCAGAAACA GAACCATCTA ATTTTTTTGG ACTGATTGA CTGCTCTTC ACTCATTTTT
 TTATTCACTC AACAACTATT TTTGAKTENT TTGGATGGGT CAGACATTGC GCTAAGTGAA AAATAGGAAG GTAAGAAAAA
 GAAGACTCTG AAGATGAATT CCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGGG CTGAAGTGAC AC

SEQ ID NO:1800: (Length of Sequence = 309 Nucleotides)

GGCATGTGAC ACTAGGCCAC AAGCGATAAG CACAGGCACC TGACTTTTAA GTTTTGTITT GTTTGTGTTT TCCCAAAGTG
 CTGATAACAA TAACAACAAC AATAGGATTC CAACCAGGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGTITGGGGCC
 ACCCAATGC CAAATCGTTT CTAAAGGAAG CTGAAAATG GGACTGTCTT TTGCCCACTT CGTTGTGTTA AAAGGGGACA
 TTTGTNCAA CTNCCCAACC GAGTTCTAGA AGNTCCTGAC AAGGAGGCAG CATCCAGCCT TGACCAGGC

398

SEQ ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANTTAC TCTGCAAAT TAATATATGA TTTACCTGCT GTINTCATAA GATTTCCAAA TAGACAAACT CGGTATGCTT
NGGATTTGCT TTACATTCTA AGTGGATTG GAGGTTGAG CAGGCGCCAA GGAGTINAGCC GAAGTTTCAT CANGCGGAGA
TGTGG

SEQ ID NO:1802: (Length of Sequence = 281 Nucleotides)

GGTGGATGTC TTTGGGCGCA GGATGGAGCC CAGACCCAGT GGTACAGTG TGGAGCTCTC TCCCTGTCCC CTGACTCTGG
CCAAGGAAGT GAATGCAAAG CAGCAGGGAG GAGGCAGGGT GGGGACGGCC CTCTGAGCTC TCCGCGATGG CTGGCGTGAG
GTGCGCTCTAA GACTTCTNGG CAGCCCTGCC TTCCCTACTC AGTCTTCCCG ATCTINTTGC CACCTTCTG TGTGGGCCAG
NCTCCCGCCA GGTACTCAGA GCGCGCTCAG AGGGCAGGGT T

SEQ ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTACAGTTA TAGTTGGGGA CATTACAAC CCTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGSATATA
CAAGAACTGT ACAACTCTGG CCGGGTGTGG TGNCTCATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CCGGTGGTTC
ACTTGAGTTC AGGAGTTGGA GACCAGCCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAA AAATTAGGCT
GGCTGTGGTT GCCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA
GACCAGCTG AAAAACATGG TGGAAACCA TCTCTACTAA AAATACAAA ATTAGCTGGG TGINGTGCGT CTGAAAAAAT
TAGGTAACT CGTCTCAA AAATAATA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCTGAAGC TCAAAGTCTC TCTCTTACA CAACCAGCGN CAACAGGGCC AAGCTACTGG CTAAGAACAG ACAAACTTTC
CTGCTTCAGA CCACAAAGCT GACCCGTINTT GCCAGACGCA TGTGCAGGGN CCTINTTACAG CCAAGGAGGG CCGCCCGACG
GNCTTATGCT CCTATCAATG CCAATGNCAT CAAAGCAGAG TGCTCCATTC GNCTTCTAA GNCNGNCAAG ACTCCATNA
AGATTCACCC TCCTGGTGGC GCTGNCCTG GGAATAT

SEQ ID NO:1805: (Length of Sequence = 349 Nucleotides)

GCATCCATGG CGGAGGGCGG CAGCAGCAGC GCGGGGAGG GCGGGGCTCC GCAGGTGCTA ATCTGAAGGA GTGGCTGAGG
GAGCAATTTT NTGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTGGGG ACCTCCAGAC
CCTCAGGAGC CTATTGCAAG AGGAGAGCTA CCGGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCT
GCACACGTT NCGAATCGCG GCCACTGCAG GCCATGGGAG CTGTNTGGAC TTCTCATCC GGAAGGGGGC CGAGGTGGAT
CTNGTGGAGC TAAAAGGACA GACGGCCCT

SEQ ID NO:1806: (Length of Sequence = 403 Nucleotides)

GTGCAGTGTG GCCAGATCTT TTCTAGTAAA ATGTGTGTTA CTGATGGGCA GACAGCTCTC ATTCAAGCAG TGACAGATGT
AAGCNCITCC CATTTTGTG GCGCATGTG ATTCAGCGTG TGGCTTCCAA GTTGCCCTGGG ATCATCTCCA CCCAGACTAA
GGAAGAGGAA AGAGCTTGGA CAACTGCACT TGGCTGTTTT TNATGGATCA GGCAGGAAT TGGCTCCAAC ACATTAGCTC
ACATTCCATT GGTTAGAAT GGGTTTCTCA ACTATAGTA CAGGTTGAGT GTAGGGTTTT GGCACCATGG GCATTTGAGC
TGGCCAAAGG CTAATCAGAG TTAGAACAAA GCCACAAAGC CTGTGAATGG TGTATTATTG TGTGAGGAGC TGTCTTGTGC
ATT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

399

GTCTCAGCT TCACTCTGGC ACCACTGTGA GCACCGGAA ACCTACCAGA AGTTGCTGGA GGACATCGCT GTCTGCACC
 GCCTGGCTGC CCGCCTCTCC AGCCGAGCTG AGGTGGTAGG CGCCGTCCGC CAGGAAAAGC GCATGTCGAA AGCAACGGAA
 GTGATGATGC AGTATGTGGA GAATCTAAAG AGGACGTATG AGAAGGACCA TCGCGAGTCA TGGAGTTTAA AAAGCTTGCA
 AATCAGAAIT CAAGCCGCAG CTGTGGCCCC TCTGATGGGG TCCCTCGCAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA
 GAATATGCCT CGCCGGAGGG TCAGCGTTGC TGTGGTTTCT AAGTTTAATG CCTGAATCT GCCTGGGCAA ACTNCCAGCT
 CATCATCCAT TCCTCCTTAC CAGCTT

SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGTACTTTTC CATTTAGATT CAAATGGAGC TAAATTAAG AGTTTTATGA GCTGTTAAGA ATGAGGTAGT TTCTCCTAGG
 ACCCCCCAAA GACAGTGCAA GTAAAGACCG TTGNNCTC ATTGCTCGAT CTTTGATAGT ATGTTCTGGA GTCTACTCCC
 CAGGAGCCAG GACAGGCGTG AAGATGGAGT CCTGTGCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGNGCT
 GTACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCCAGTTAA GGCCAGACCA GGCTGAGTGT
 GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT
 GGGTACCTCT CTTATGCGAA CCAGAGACAT T

SEQ ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAAG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG
 ATCCGGCCCC GGCCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG
 AGCGGAAGGG CACCCTCAAC CGGACCTGC TCTTCGACCC GCTGGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC
 TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCCGATCAT CAGCAAAGGC
 ACCAAGGACT CTCCGCTGT NIGCTTCAAC CTGGGCTGCC AAGAACAGCT TTTTACAACA ACAAGTGCCT GGTGCACATC
 G

SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTGAAGG ATTAGAGAAA
 GCTTCCAGAG GGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCTCT
 ACCCAGAAGC ATTGGGGTAT GCTATGCATG GATAGNCAA GAATTTTTC AAAAGGGGG CCAGCAAGGC ATT

SEQ ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAAGA GTTGAAGTAT GTACATTGAA AAAAGGAAAG ACATTTTTTC ATACCAACCT TTCCCTAGTT CGCAGTTTCT
 GAATAGTAGA AACAAAACAC ATTTTAAAT CTTTCTATCA ATTTAATTTA GGACGAAGTA ACACAACTTT TATAATTAA
 CACTGAAGTT GTCTTTAAGG ACAAACCTTA AATTTTAAAA TGGGTGTTAC CATATTINAT GAGTGGACTG ACTCCAAGGT
 TGCCITGCTC CAAGNNTGGG CATCGTGACA TTGCGTGAT GCCCAGAAGA AAGTTAATGG CAATGATGTC CAGTCAGAGG
 GCAGACATGC TACACATCAC AATGATGAGA GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAAT TATTATTTTC
 CATCAAACT AACTGGGAGT GAG

SEQ ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAAA GTGTATTTGG CTGTTCTGAA GCAGGCCATC
 ATCACCCCTC ACCTCACCCA CAGGTGGCTC TCGGGGGCTG GTCCATGGGC GGCITGGCG TNAGGATGGA GTCCTAGCTG
 TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG
 CCTGGGGCTT CAAGAACCTC CCATCTATCC CCAITCTGA GACAGGAGTT ACAGTCCCTT TTGNNCTTNA CATCCAATAA

400

AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCCC TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

CATCAGCGAC AGGTCTCCCT CCCAGAACCC CATCAGGACA GGAGAAAAGG CAGCAAGAGA GGTGGGGTGG TCCTGGCAGG
TGGGCCACCA GTTCTCTGAA TGAAGAGTGA GTCCCGGGTC AGGAGTCCAC ATCAGGTGTG GGCTGCTTCC AATCTGTAGG
TCTCCTGGA GATTNHCACA ATCTGCCAGC TCTCTGGGAA TCACAGAACC ATCATGTCCC CTTAGGATGG CAGAAGATGT
GGCACAGCCT CAATCTCCAA CACTGAAACA CTNAGAGAGC TTGATACGTT CCTTAGGCAG GGCAGAAACA TCACAGCACT
TCACGNTAGG AACCACGAAA GAGT

SEQ ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTTTGTCCA GGTGGCCCTG ACACATAGGA ATGCCCAACT
ACTGTGACTA CCTCTGAGA TAAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCAITTTG GAGGTCATGC
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCGGTG CGTAAAGAA ATAGTACTTG AACTTAAATT TATTACAGCA
GGCCATTTT ATTTCTGCA GAAAGGTAC ACTTGGCAGC AGTTTINCCA CGAGAGTACC CCGAACAAAG GAGACAGGCT
CAITTTATAAC CTGACGCGTC CACCTTCTG CTGTGTCGGG TTTCATTGG CTGGAACAGG ACCTCACATT CTGTATTGT
CCCGATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEQ ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCTTGAACCT GGNAGGCGGA GGTINCAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACAAG
AAGGAACTC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAANG GGACCAAAA AGTACCAAAA
ATTTCAAAT TTTGTTAAAC TGTACCAAT CTGGNTACGA AGCGTTATTT TTGCCACAG GGCACITCCC TGGAAAGNCG
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCAGTAGGA TAGGCTCTT

SEQ ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGTC CCAGGTATGC TCCCACCTCC ACCTGCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCCACC
TGGTCTCTC CCATCGCCCA CAAAAGGGG GGCACAGGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGGG TGAGGGTGGG
CGACCCAGGA TTCCCCCTCC CCTTCCCAA TAAAGATGAG GGTACTAAAG TTGTCTTGGT TTTTATTTTA TTATTATTTT
TTTCTTTTTC CAGTATACTA GCTTGTCTTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGTGGG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAAGG AGAGGGACTA TTGCATAGCA
GATGCAAATG AAGGGACTGT CTTATTATAC AGTTTATCA TCTGTTAATA CTCATAATCT TGTTCTTTT TCACTTTTA
TATAATTTTA TCTTTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGTC ATAGGTTACT TTTATATATT
ATTGAATTTA TAATAACAT GTTCTTTTNC TGGAACTGG GATGNNACCN CGATGGTGT TCTTGAATAT AAGAGTGTCC

SEQ ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC
AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TTNCCAAACA GGCTTTACTA AACCCCTGA
GGTCTCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT
TAGAGTCCCA AATCTGCCAC TTTCAATCTG TATGGCTCA GGCAAGTTAC TTAANCTTTC TGTCTCTCTG TTTTCTTTAT
AAAATGGGGG ATAATAATAG TAACCTCTTC ATAGG

401

SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCTT GGGTATCCTA GCTAGCAGCA
 CTGTCTCTTT CATGCTTTIN AGACCTCTCT TCCGCTGGCA GCTCTGCCCT GGCTGGCCTG TCCTGGCACA GCTGGCTGTG
 GGCAGTGGCC TCTTCAGCAT TGTGGTGCCC GTTTTGGCCC CAGGGCTAGG TAGCACTCGC AGCTCTGCCC TGTGTAGCCT
 GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG
 GGTGCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CCACCATGCT CTGCACTCGC NCTGGTACCA GGCCCGGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG
 CAGACCCGCC AGTGCAATC CTTTACAACC GCACCATGCT GCAGCTGGGC ATCTGTGCCT TCCGCCAAGG CCTGACCAAG
 GACGCACACA ACGCCCTGCT GGACATCCAG TCGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGCTGCGCAG
 CTTGCAGGAG CGCAACCAGG AGCAGGAGAA GGTGGAGCGG CGCGTCAAG TCCCTTTCCA ACTGCACATC AACCTNGAGC
 TGCTTGGAGT TTGTTTTTANC TGGTGTCTGC CATGTTCTT

SEQ ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA
 ATAGAACCCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCCTCT TCAAAGAAAG CTTGAAAATG
 AAATCTCAGT TAGGCAAGNC AGATAAAAGC AGAGTTATTG TGGTGGCG

SEQ ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGTTTGT AGCCAGAGTT TAAGCCTGAC ACACAGGCTT TGGTCTCTAC TGAGCTGTCT CCAAGACTGG AACTACTTAG
 TGACTCGGCA AATTTTCTGC CCCCCACCCC TCATCAAAGC TGCTAGTTCA GATGTTGACA GTGTTTTTCAT GAATGTTGGA
 ATCTTACTAG TCCAGACTTA CTTAGGATGT TGTGGGGGAA GGCACCTGGG ATTTTCTGTG TCTTGCAATC ACAGAGGGAG
 GCCATTTCAG ATTCAAGAGC ATTKGATTAG GGGATCGTGA GGCAGGGATG CTACTGCGKA TTTCTCTCTT CAGG

SEQ ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTTTG TCTTACTAC ATCTTAAAGA ATTAGAATTT GGGTTGGTGT AAGTGACTTA CTTCCAGGNN ATCATGCTCT
 ATTTCTACCA GCAGGTCAAT CCNNAATGTC ACACTATCTA TTGTTAACCA TGAATENTAT TCAGATCTAT TACTTTTCTG
 GAAAAGTGGG ACATGTTACT TCCAACCATG GCTGTGACC GTGAGTGTGA TCANCTTNT CCAAAACCAC ATGGGTGCGA
 GGAGCTAAGG GGTGGTACCC MAATGTTAGG GACAGTGTGA GGAAGGGCA AGGGAAAAGA AGTGACTNGA TGTCTTATGA
 GRAACCGTA AATGGCTTAA AAAA

SEQ ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGGCA GGTATCATGA ACCACATTGT GGACCTGGAG TTGCTAGGAC CTTTCTGCCC ATTACACAGA AAAATCCTCC
 CTGAGAACAC AGCCATTNGA GGNACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGCGTGG
 GGGCTNACGG CTGTAATCCC AAAACTTTNG GAGGCCGAGG TGGGCAGATC ACCTAAGGTC AGGAGTTGGA GGCCAMCCTG
 GGCAACATGG TGAAACCGT CTCTACTAAA AATACAAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TCCTAGCTAC
 TCAGAGGGTT AGGCAGGAGA

SEQ ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTTGGTTG TGGCCAAATT CTCAGTCCAA TCACCCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCGTCTCC
 TTCGGGGT CCGGTCTGG AGGAGTCTCC CCAACAGGC CAAAGCTGGC TGTTTTCCGC CCAAAGCCCC AGAACTTTGA

402

ATGAGAGGCA AATCTACCCT GAATGCACCT CCCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC
TCCCCATCTT CTGGGGGCCA ATTCTCTGG ACACTGTGG GTCANCTTCC TTTTAAAGT GCCAGTATCG GTGGGGCAGG
AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGCG

SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

CCGGCCCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CTTGCACCCA GCGCGGCTTC AGCCCCGATT CCGACTCCCA
CCCCGGCACC AGCCCCTGCC CCAGCTGCAG CCCAGCCGG CAGCACAGGG ACTGGGGGGC CCGGGGTAGG AAGTGGGGG
GCCGGGAGCG GGGGGGATCC GGCTCGACCT GGCTTAGCC AGCAGCA

SEQ ID NO:1827: (Length of Sequence = 309 Nucleotides)

GTGTGCGCCT GTAGTCCCAG CTACTCCGCA GGCTGAGACA GGAGAATCGC TTGAACCCCTG GAGGCGGAGG TTGCATTGAA
CCGAGATCGC ACCACTGTAC TCCAGCCTGG GTGACAGAGC GAGACTCCAT CTATAAAATA AAATAAAATA AAATAAAATA
AAATAAATAA AATAAAATAA AATAAAATAA AATAAAATAA AATAAAATAA TAAAAATAAA TAAAAATAAA TAAAAATAA
AATAAAATAA AATAAAATAA GAACCACCAT ATGANCAGC AATCTCATTG GTAGTATAT ATCCGAGGG

SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCCTCCT CCCCATCCCA CCTTTGGTA ACTCCCCCGC CCAGGNCAT GCCCAGATAT ATTCTTCTCC
TTGGGCAAGA AGTTCTGTGC ATGCAGGTCA AATCTGAAAG GGNCATTTCT TTCTTTAATG AGTGTGAGG ATGGGGGATG
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTTGAT GCTAAAAAAG
AAGGTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTGTGAT CCCCNITTAA ATTTTCATGT
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCCT CTGGAGCTGG ATGTCCAGGC TGCGGCGCT GCTGGGCTC GGGCTGCTGG TTGGGGGCTC GCGCTGCCG
CGGATCAAAA GCCAGACCAT CGCCTGTGTC TNGGGACCCA CCTGGTGGG ACCNCAGCG CTGAACCTCG GTGGCCGCTG
GGAATCAAAG GTCATGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCAGGC CGTGGACCAG GAGCTATTTA
ACGAATACCA GTTCAGCGT GACCAACTTA TGGAACTKGC CGGGCTGAGC TTTGCTACAG CCATGCCCAA GGCATATCCC
CCCACGTCCA TGTCCAGGAG CCCCCCTACT GTCTTGCTCA T

SEQ ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACGTTG GCTGCCTGCA GGAGGCGCTG CAGCTGGCCA CTTCCTTCGN CCANCTGCEN CTCGGGGATG TAAAGAACTG
AGTGGGAAG GAGGAGGCTC CCACTGGATC CATCGTCCA GCCAAGAGCT CTTATCTGC TACAAGAACA TTTGAATCTT
GGGACCTTTA AAGAGCCCCCT

SEQ ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCGACT ACTGATTCAA ATGCTAATCC TGGACGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT
TGGGAGGCTG AGGCTGGTGG NTGCTGAG GTCCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC
TAAAAATACA AAAATTGCT GGGCGTGGT ACATGCGCT GTAATCCAG CTACTCGGA GGCTGAGGCA GGACAATCAC
TTGAACCCG GAGGCAGAGG TTGAGTGAG TTAFTGCACC ATTACTCTC AGCCTGGGTG ACAAGAGCGN AATTCATCC
CCCCACCAA AAGCG

403

SEQ ID NO:1832: (Length of Sequence = 337 Nucleotides)

GIATTTGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA
 GAGGACGCAG AGAGCTCTCT CACACCTTCC ACTGTCTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT
 CCCCACCAG AACACCTTGA TCTTGGACTN CCCAGATGCT CCANATCINT GAGAAGCAAA TTTCTGTGCT TTATAAGCTA
 TCCAATGTAT GGAATTTTNG TACAGCAGCC CCAACAGACT AAGTATTAA TAAAATAAAG ATGTAAGATC TCTGTTGAAA
 ATGCACAAAT AATATCT

SEQ ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTG TAAGCACAAA TTGTTCCGTG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCC
 TTTTAATAGA AAATGTGTCAT TCTAGCCTGG ATTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG
 ACAGCTTACA AACTGGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTTG AAGATCTGGT TGTGGAAGC TGGGCGCCCA
 GTGC

SEQ ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTTTGCC AACATGGCCA TGTGAACCA CCTGCGCAGG CCCCCGTCTT GCAGTACCTG TACTACCTGG
 CCCAGATCGG CATCGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC
 CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCAGTT CCACTTNACC AAGGAGCCGC TGATGGAGGA
 GTACAGCATT GCCACCCAGG TGTGGAAGCT TCAGCTCCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GCTCATGAGC
 GG

SEQ ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAATT ACAAAACTT AAAACCGAGT AAACAAAAC TCAAGAAAGAA TGAAAACAAT
 TGAAAATAA CTTCAAGAAA AAAATGTAAA ATGGAACAA TACAAGANCA ATTTGTGCCC TCTGAAAAC AGAGGTTAAA
 GTCAGATTT TTTGTGNC

SEQ ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCTTGGNAC CACACCCAGC TAATTTTGT ACTGTTAGCA GAAACAGGT TTCATCAGT TGGCCAGGCT GGTCTCGAAC
 TCTGACCTC AAGTCACCA CCTGCCTTGG CCTCCCAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA
 TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGAATTTAG GATACTTAGG
 AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACATA GGGAGAACCT TAGAGTCTG TGGAGCAGAA CCCAGCATTT
 GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTTGTGACTT ATNCCGGGT CAATCTT

SEQ ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC
 TCCCAATAGT CAGCCTTGAC TTTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCAGTTGT CCGATTATG
 TCTGCCTTAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCTG GAGCTCCTGC AGTCTGCCAC
 TCGCTNCTTC TGCCTGATAA CAAATACTAT TCCTTTTATC CTTGCAATC GACCCAGAAA GAGGTGGCTG TCAATGTCCA
 AGGCCCCCTG GAAACGAAG ACTGGAATN TGAAACCACT GGGCACAGG GGAATGGGTG GGTCTGAG

SEQ ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTTAAATT ATTTGGCTAG ATAAACTAC CAGCTAGATG GATTIATTTG
 GTGCCCTCAT ACAGAATGCT GTAGAAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTTCTAG

404

GATGGAAACA AGTCTGCTA TTTTCACAAT CCTAAGNGT TCTCCAGGCC TCTGGAGAAC AAAGTAAAGT TGTAAAGATCC
 CCAAAGACAC GGAAAATCCT GGACGAACAG ATTAGAAATA ACTACAAAA ACAAGTTTTT TACTTTTGGAA AAGGGTACTG
 CACTGAAACC AAGTTGGACT TTTGGTCCAC CCCAGGGCC CTCTTCAGG

SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTTT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGAATAGAC ACTAGGACCA
 AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACCTAAAA AATTAAAGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA
 CTATCTGGGA ATTCTTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTINTCAC AAAAGGGTGT
 GAAATGATCA CTTCAGACT CCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGGG GAGGTCTGGG
 CTGGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCTG

SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTCACA AAGCTTGGAA
 ATTGCCTTGG CATCCACCTT TGGCTCTATG CCTCCTTCA CGGCACGGCT GACCAGGGGA CAGTCCAGC ACCTTGGCAC
 AAGAGGGAGC AACACTTCTT GGAGGCTCG CACGGCTCG GAGCAGCTG GGAGCATCCT GGGCCCCGAA TGTGCTCTCT
 GCAAAANAGT ATTTTINTCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCTGCGGCC ACCTCCTGTG CCGNCCCTGC
 CTGGGTNAGA AGCAACGGTC CCTGCCCATG ACGTGACAG

SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GTGTGATTCC ATTTATATGA AATGTCCAGA ACAGGGAAAA CCTATTNAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT
 GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATTGCTTC ACGGGTGAT GACAGAATGT TCCAGAACGT GACAGAGGTG
 GTGCCTACAC AACTTTCTGG ATGTACTAAA TGCCGCTGAT TGTTCACTTT CAAGTGATTG ATTTTITAGGT TATTTGAATT
 TCATCTCAAT TAAAAAACC AAACACGCA ACTGCTCCCG CCAGCTTCAG CCCCAGGCA GACGGGCGAN CCGTGGGAGG
 GATGCTGAGC CA

SEQ ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCTGGTCAAG GCAGAGTTA CTGAACNIN AGTTTCTCC TGCACACACC GGGCATGACA CCTTCAAGTC TGNCAGCAG
 TGGGTCCAGA AAGTACCCTG TGTGCTTGG ACGCAGAGGC TACAGTTCTN ACTGTGTGGC ATGGGAGCCT TCANAGTGCC
 CTCGGGAGCT GCCCCGTGTC TTTGTCTGNA AAGGTGACTG GGAGGNTAGA AAAAGCAGCG GGCTGGCATT GTTTCGGGGG
 TGGGGT

SEQ ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTTATTGCA AACAAAATTG AGGTAAAAGA AGCTGACCCA GAACCCACGC CCGTCCAGGC TGGGGAAGTC TCTACTCGCC
 CCACACCAGG CCCCAGCAC CGCGGGCCCG AAGCAGCCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC
 TTAAGCCCCC ATGAGTACAA CTGCCCAGGG CTGCCCAATT CCCAGAGGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC
 CCGGCTTCAG GTGGGGCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTGGGGCTGG GGCATTCTCT GCC

SEQ ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAAACCAAA CTCAGCCGC TGCCAGTCGG GACTTGGTCG CCGNCGCTG CCAGAATGCT CCACTGCCAG
 CCGGCCCCC TGCCCTCGTT TCCCTTCTGT TTAGTGGCGA CACAGGCACC CAGCTTTGGG GTGGTGCTGA CGCTCCAGG
 GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCAGACG CTCCTGAGG TGCCAGCTC TCCAGGGAGC TTCTGNCOA
 AGGNCCTCTG AGGGATCTGC TCCTTAACCN CCA

SEQ ID NO:1845: (Length of Sequence = 441 Nucleotides)

GGGGAGGGGC GCACACACGA AGGGAGGTGT CAGCCGGGAC CGGAAATCCA ACACGGCAAA GGAAAAAAA CACAACCCGT
 TTCCCAAAGG GAGGAGCAGC AGGAGACGAT GAAGAGAAGG AACAGAACTC TCTGGGCAAT TCTGATGTAC ACCCAGGTAC
 AGTGGGGATC TCTTCACTTG ATGCCCCAAA AAAGGGATAA ACAACAAAA AACGTGAGCA GCCAGCTTCA TTCTTCTCTC
 TGCCTTGTCT CTGCCAGTG ACTTGGGTT TTGTGTGAA GCTCTCTTAA TTCTTTGACC TTGAAGTTCC TCAACATCTA
 TCCAGTAGC CTCAGTTTCC ACTTGTCTC AACTAACATC TTGGACTTTT TTCAGTCTTG AACAGGCTA AACCTTTGAG
 ATCTTGAAC CGGACTTCAG CCTACTTAGC TTGATACTAC C

SEQ ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATTCAT TGTGTATTTA TTATTCACAG TTAATCATA CCTACCAAAT GCTATCCGCA GAGTTAAAGG ATTAAGTACA
 TAGGTCTTTA TTAAACACT GATTTTTTTT TTAAATATA TACACAAAA ACTTAGTTCA GCAAGGCTTC ATGATATACA
 CCAATTCCAA AATAAAACAA TCAATGGTC CNGGNGTAGA ATGCCAGATT CCTTTTATCA TCTGCGAGGA AAAGAGAAGC
 AGGATGAGGA AGAGT

SEQ ID NO:1847: (Length of Sequence = 311 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCAC TCACTCG CAACATTCTT CCCACATCCA CATCCACGAC
 GGAGCCAAAT CTCATTGTIN ACCCTCAGTC ACCACCCC TAGGAGC CACTGGTAC GNCATGGATG ACAGGTGTCA
 TGCACAGGGA GAGAATTINT CCCCAGTAC CCTGAGG TGGNCCAC CCCCAGGCTA GGGTGGGAGG ATTTAGAGCA
 GTGCAAGAAA CCAAGGAGGA TGGAGCATCC AAAGGAAGG AGGCAGGC TNGGGGATTG AGGCAGGAA GGGCT

SEQ ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGTGTGTAT GCGGACCCTG CCATTGTCTAT CATGGACGCA GGCCATGACC ATCATCACCA
 CCCATTTINT TGTCTGAAGA GAATCCAAC GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC
 TATCATCCGG TAGCTGAGGA AATAGTCACA GGTCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT
 TTCCACAGTC GTCCACTTTG ATTTTGGCAA ATGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTGGGTG T

SEQ ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCCC CAAGAGGGGC CTCAGTCACG AATGTGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCATGG
 TGAAAGCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTGCTGG GAGCCGGGGC CAGGCCGTGG CGTGAGGTCC
 AGAGGGTAGG CGAAGGCTTG GCAATGCTGT AAGTAGGGCT GCGGTCTTNA TAGATGGATG GCTCAGGTG GCGGTACGTG
 GTAGGTCCAG GGCTCCTG CACATCCTCC TTGTAGANCC AGTCTTGTG CCTGGAGGCC AGACTINTAGC AGGGAGCA

SEQ ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTTTCCCT CCAATATGAT GATTACTTTT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCCT
 CTAATCCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTGAG GAGTTCAGGA CCAGCCTGGC CAATATGGTG
 AAACGCTGT NTCTACTGAA AATATAAAAA TTAGCCGGGT GTGGTGGTGT GCACCTGTAG TCCCAGCTAC TCAGGAGGCT
 GAGGCAGGAG ACTCACTNAA CCTGCTGGT GGAGGTGCGA ATGAGCCGAG ATTNCACCAC TGACTNCAGC TTTGGCAACA
 GAGCAAAGAC TNCGTCTTCA AAAAAAATA ANAAGGGAAA AAAAACCCTG NAAAAGCTTT TTTATTGTGA AAAACAAGTG
 GGTAC

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

406

CTGAGGGGCA TTTTATTATTA TAAATTTAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTCA
 ATATAAAAAT TTTAGCAGCA TTTCCATAGT TTCAGGCTCC AACATTAGTC GTACTTCCTC CCTCCCGCTA TCAAAAAAAG
 AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC
 CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG
 ACAAGGAT

SEQ ID NO:1852: (Length of Sequence = 174 Nucleotides)

GGGCAGGACG GCTCTNGGCC CTTCCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCTGTC ACACCTTTGC
 ACGGGACCTG GGGGAGAAGA TGNGCTGGA GGTTCGTGTT CCTGGCACGA GGCCCCAGCG GCCTNCTGCT CTTACNAACG
 GAGCAGTAAG GACG

SEQ ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACAGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCACAT ATACACACAC ACATATACAT
 GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC
 TGCATGTTCA CACACNGGA CGTCACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG
 GGGTTGGCT GT

SEQ ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAACAATG GTCTGCAGCT CAGTTACTCC TCATCCTCGC CTGGGCCGGG CCAGCATCCA CTCCCCTTCC
 TGTAAAGCAT TTGGATTTC TTGGGAAAC AGCCCTGCCC TCTGTCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA
 GTGACTCATG TTGGTTCACT GATTCCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT
 TGGGGCACTG GGCAGTTTCA CATCTCAAG GCTTGGCCAT CATCGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAATGCTTG TTGATATTTT AGTTATTAAT TCATATTAACT TTTGGCTGAA ACTTTTAAAT TCTATTGTGA ATAGTCAAGT
 AAAATTTAGA TTGTTACATT CTGGTTAGT ATTAGATTGT TTTTAAAGATT GTTTTAAACA AGATGTTTTT AAGATGAGTT
 TTAAATAGTT CTCCTAACAC AAATAAAGCT TAATATGAGT ATTTGAAGGA AATTATCCCA AACCATTCCA GTTCCTGGCT
 GTGAAAGGCT TTTCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEQ ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCTTA
 AAGAAGAACC CACTGAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGGGCCGGA ACACCATCTT
 TCGCCAGGCC AGGAATCACA AGCTCCGGGT GGATAAGGCA GCTNCTGCAG CAGCGGGCAC TTACAAGCCA AATCAGATGA
 GAAGGCGGCG GTTGACAGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGGCTGCTGT TGGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAAGCT AATTGCAAT AATCCTTGCG GGAAGGTGAG ACTCCTCTCT TACAGATCTA GGGAAAGGCT GTTAAATGA
 TGGCTCTTTG GAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTGGGC CCTCAAGCAT AGGCAACGAA CTTGTTCTTG
 GCTTCACGNT TTCTCATTGA ATCAAAGCTC TCATGCATGG CCTGGATTG TAAACACATG CTGGCTGCCA GCAGTGGCAA
 GTTAGCCTCC TGACCCACTT CTCTCTGCT TCACTCTGG TGTATGAAGG GGGATGAGG

SEQ ID NO:1858: (Length of Sequence = 295 Nucleotides)

407

TAAGACTTCC TGTTAGTAAA AGCTACCTCA TGAAAAGTAT TGATGTTATT TGCCAAACATT TAGACTAGCT TTTGTTACCG
 TTTCAGTTAT TCAATTTAGT CAGCACATGT TTGAGTGTCT TACTGCAGGT GAATAATCCA TGATTTCTGC CCCAGAGTAG
 TTCATAAGAC TGGTAGGATA CATAGATTG TAAATAAATA ATTATAATTC TGGGCAGTAA GTGCTGCTAT AGAAGTCTCT
 ATAAAGCAAT GTGCAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTTAG TGCTGGGGCT TTGGAAGCAA ATGTACCTGA GTTTGAATCT CAGGGATAAC CTTTGGACTG TGGCCCTGGG
 TAAGTTACTC ACTGTCTCTG AAACCTCAAG TTCTCATAA ATAACCTAAG ATGGACAATC ATAACCTCTCT CTTGGATTGA
 GGTAGGAGAA TATGGTGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TTCTAGAAC TAAATTAAAA GGAAACCCCT
 AATTTTCCAT GCCTAAGTAA CAAAAGGACC AAAGGTTACT CCGTTTGCAA ACTCCACCT TTTCTGCATG GCAGATGGGA
 AGTTGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACCTGG CCCGCTACA GCAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCTCTCC
 TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA
 CAACATCGTG GTTCTGCTCC AGACGAGCCC TIACCACGTT GACTCACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG
 AGGATCAGGA GATGGCTCGA GACCTGCTAG AGAGAGCGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTCGAGAAA AGCAGGCAAC AGAGGCTGA TGTCTGACAT TGACTCTTTG GAAGATTAAA
 CTTCTCACA GATTTTINATA ATNACTTTGG AAATNATGAC TGATGCCAG GCTGTTCCTT GGGTGGACAG TTTGTCTTTT
 TTTTTTTTTT TTTTTTTTT TTT

SEQ ID NO:1862: (Length of Sequence = 296 Nucleotides)

TTGGGCTTCT TAAAGTT... CCCATCCCTC CTAAGGTCTA AGATGATGCA TTAACACAG AGGATGCCCA ACAGTGGCTG
 ATGGAATTAC CAAGTAAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTTTA AATTTTATTT TATTAGTATG CAGGTGGGAT
 TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT
 AAAATACTAT GTAGACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAA AGGGGCTCAA ACCAACAGGA AGTCAGCCCC ACCGCAAGCC GGACTACAAC TAACTCGTGC TCTCCACGCT
 CAGGCGTGGA AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATCTGAAC GTNTAGCAAT
 CAGGTCCCCT GTAATGTGCT TGGAGAGTNT GGACAAGGGC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGAA
 GCAGAAGGGC ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCTGTGG
 ACCATGAAGA ATGTCACCAA GCTCCCTCA GAGTCAGCGG GAGCTCAGCC AAAGCACAAG TGCAGTGCCC AGCTCCTCCC
 ACTCTGCACC TGCTGCCTCA NACTCCCCAC GCTGAGCCCA GGCCCTACC CTCTGAAGGT GTTTCCCATG TGATTCTGAC
 ACACACACC CACAAGAACC AGATGATCTA TGNCATACAG CATTTAGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

408

CATTTCTGTT ACATTGAGAC TTCAGTCACC AACATCTGGT GGCAGAGATA CAGGTGTATG AAACATTTCT ATTTACCCAA
 ATATGCCAGT TCCCAAATAG GATGACTGCA TTTAGTGTTA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT
 TAGCTTCTTG AATAGAAAACC ATCCAAATGA TGTITTTTTT TTGATATGTC TGTAACATA AAAATCAGCA AATAAG

SEQ ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACGGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATGAGAA AATGCTCACA GACCGCGGT CTACAGACCT
 TAATGAGAGC CGCGTGCGAG ACGTGCTTGC CTTCCCAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG
 AGCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC
 GGACCGGACT GCTCGAGGGA TGAAGGGGGG TNCOCGAGG GCGCAACCCA GCCTGCCTC CGAGATGGAG GAGGAGAAGT
 CGATTCTCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA
 CCCCTCCTCC ACCCTGGACT GGCT

SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCAGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG
 CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCAGTT GGGTIGAAAA GTTGAAGAT TTTCATCTT ATTGAAAAGA
 ATTTTTCAAA AATGTTCTG TACAAATGA TGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC
 GGTCACCCAC CAGCTT

SEQ ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGTTTTT TTTTATTGT AGCTATAGCT ACAACTTGGC AGCATGGGG AGGGTGGGA TGTCCTGGAG GGTCTCCAG
 CCTCCGCA GCAGAGTACA AAGGCTGCTC GGGGGCCCG CGAGGGCGC GGTGCAGCA GTGNAAGCAG CAGCACTAAA
 CCTGGTCCCC CCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCAGGGCG
 GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTGAN GGCACCTING NATGCTA

SEQ ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTGGGAGG TATCCCATCC CTCTCCAGA TGCCAAGGAG
 CTGGAGCTGA TGTTTGGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCTT
 TAGCTCATAC GGAATGGACA GCGCACTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCTCCAA
 ACTGCCAGT GGAGTNTTCA NTCTGGAATT TCAAGATTTT NTGAATAAAT GCTTAATAAA AAACCCCCGC AGAGAGAGCA
 GNTTTTNAAG CAACTCATGG TTCATGCTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGGN
 TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGNACAACC AACCCATGNN TGNITGNGIT TAAGNGTTTT

SEQ ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TTTGTTAAAC ATCTAGGTTA AAATGGTTAA AAGGATTTTC ATACAATTTT AGGCACTATA CACGTTGTTT
 ACAACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTGTGAC ATTCAAATA
 ATTCCATTTA AGAAACATTA ATCAAACTT AAAGAGACAT ACCACTAAGT ATCCACACA GTATACTGAA AATAAATATA
 GNAATACAAC CAGAAGTCTA CAGNTACCA CAGTAGACAG ACTGGTGAAG NCCCAGCTTT TCATGGGCAG TNAAGGGCTC
 TGGGCTAGAT TTGGGTGTCA ACTG

SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTG TCATTCTCC AAGGTCAGCA GGGGAAGGG ACACAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG
 CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGTG CCTTCTCACT GGCAGCAGCT GCATTCTCT GCTCTGCT

409

CAGCTGCCTC TCCGCCTTTG CACACACAGT CCTTGGCACA CTTCTCACAC TNCSCAGGCA GCAGGAGCAG CAGCTCTTCT
TGCAGGAGGT GCATTGTCAT CCCTCGCACT TGCAGGAG

SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCTTCCTT GCTTCATGCG CAGACCCCTCG TGACTCCCCT TCCCTTATAA GGGCCCCCAT
GATTACTCAG GGGCCACCTC AACCATCCAC GGTCATCTCC CCACCACGAA ATCCTGAACT GAAGCACAGG CGCCGGGTCC
CTTTTGGCCAC GCAAGGTAACT ACTTTCCAC GTCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TTNCACCCAC
CGTCATCAGT GAGGCGCCCT NAGGAGGGGC T

SEQ ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGGTATAG TGCACTGGCG CAATCTGGC CCACCACAGT CTGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGCCT
CCCAAGTAGC TGGGACTACA GGCACTCTCC ACCATGCCCA GCCAATTTTT TGCAATTTTC ATAGAGAAGG GGCTTCACCA
TGCTGCCCAG ACTGGTCTCG AACTCCTGGG CTCAAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTAGG ATCAGAGCCG
CGAGCCCCCTG GACCCGGCCT ATAGTTTTTG TTTCGCTTTG TTTTGTGTTT TTGAGATGGA GTCTCACCCT GTCANCCAGA
TGGGAGTGCA GC

SEQ ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTTCCTCTCC CATACATACC TCACCCGGCC
CCCAGCCAC AGAGAGGCTG AGGGAGGGGC TCTGGGTCTT CCTCCATCCC TGTAACCTGCT TCTTCCTCTT TCATTTCAC
CTCTAGATC TTTCCCCCA CCCAGCCAC CTCCAGGCTG GGAAGGTGA GGAATTCITT CTTCCACAC CCTACCCAC
CTCACCTGCA GCTGTGCCC TGGGCCAGGA GAGGCATGGG TGAACAACCA GACCCACAAC CCCCAGCCT GCAGGCT

SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GIGTCCACC CACCTGGCC TCCAAAGTG CTGGGATTCC TGGCGTGAGC ACGCTGCGCC TGGACAGTCT GCCCCTAGAT
GAGTTGCCCA GCACGGTACA GCTACTGCCT GCCCAGCCC CAGCCCTGA TTCTACCGCC GCTCGGCAGG GGGACGGCCA
GGGAGAGGTC CAGCCGCGCG GCAAG

SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AAATAGTCAG CAAATTCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAG TCAAGAGACA
AATCTTCTCT CCCCATTCT CACTAATAGT TATTGAAGGG GAAAAAAA AACCCACAA CTTTTTAAAC TAAAGATAAA
AACAAATGAA AATGAATAAG ATCCAAAGAA TGTCTTTTGT TACTCTGCCT TATG

SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TTTGAAGAAG AAGAAGTTGA ATTTATCAGT GTGCCTGTCC CAGAGTTTGC AGATAGTGAT CCGCCAACA TTGTTTCATGA
CTTTAACAAG AAACCTTACAG CCTATTTAGA TCTTAACCTG GNTAAGTGCT ATGTGATCCC TCTGAACACT TCCATTGTTA
TGCCACCCAG AAACCTACTG GAGTTACTTA TTAACATCAA GGCTGGAACC TATTGCTC AGTCCTATCT GATTTCATGAG
CACATGGTTA TTAGTGATCG CATTGAAAAC ATTGATCACC TGGGTTTCTT TATTATCGA CTGTGTCATG ACAAGGAAAC
TTACAACTG CAACGGGAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

410

GAAAAACAAG GAAATAGGC AACACCTGC AATGGACACT TTTCTCTACA GAACCTTTTC AACCTGAAT TGAATTGTTT
 CCTATTTCATT TNCTAATAAA AAGTTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC
 CATTAAATAGG ATTTGAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCTTTACAGT CAGAATGCCT
 GAGTTTGTAG GCACTGTTAC TTCTAAACAT CTCTAAGTTT CTATTNCTC ATCTAAAGGA GTAATATTAC TTTCTTAA
 AGGTTG

SEQ ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTCAGCG AGCCAAGATC GTGCCACTGC ACTCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAAA
 AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGTCCCG GGAGGACCT TCCCTCCAG ATGAAGCTG
 ATGGACCAGC CCAAAGGAGG GGAGAGAGCA CTINGGCCAT AGTGGTGGTG GATCTTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCTCTCT GGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG
 GACAGCAGG CTGGACACCA GTGCCGAGT CAGCGGCTG CATCCCAACA CCAAGTACCA TGTACCGTG AGGGCCTACA
 ACCGGCTGG CACTNGGCTT GCCAGCCCTT CTGCCAAGC CACGACCATG TAAGCCCCCT CCGCGGCGAC CTCCTGGGA
 ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT
 GAAAGTTGTC TCAGTGAAGG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEQ ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCACTGG CACGATCCCG GCTCACTGCA ACCTCTGINT
 CCCAGGCTCA AGCTAGTCTC CTGCCACAG TGCCCGAGCA GACGGGACTA CAGGCACCCC CACCACGCCC GGCCAATCTC
 CAAATGGTTC TTTTTTTCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEQ ID NO:1883: (Length of Sequence = 214 Nucleotides)

GTGATGAATA CATCCAGTTT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTGGTTG
 CCAGGAAATT TACCTTCCTA ATTACATTTT GCAAATGTTT ATTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG
 TGGCTGCTGG AAGCCCCAGG GCACCGTGG AGGGACAGGG GAACGTCCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTGGCT CTATGTGCCA TCACCTGGAC ACTCTAGGTA ATACCCCTTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG
 GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCACAT AACTGTTCTC ACAGGATAGA GTTGTACACT GGTGCTTACA
 GCTTTCTCTG GCCAGTGTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEQ ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTGCGTGTG GCGGTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAGGG
 AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGTGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT
 GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAAGTGC AT

SEQ ID NO:1886: (Length of Sequence = 208 Nucleotides)

411

CATCCGCATA GTATTTACAT CATGGGTATA GGCAAGTNCCTT ACAAATCAGG NCITTNCCCTT GGGGATGGAT GTTTGGAGCT
AGTTTACCAG CACACCAGTG GGTAAAAGTG AACAAATACT TTTTGTATCC CACAGAATCT TAAAAAATAC TTTACTTCGA
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNTG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCAC T GCCCGCCAAC TCCCATTCOA ACTTCCTTTT TACACTGGAT GTTCTATCA CATCTGAGG ACCACTAACC
CACCAGCAAG TCTCCCCCTG ACACACATTC ACGTAGGTCC ATACCCCTTCA GAGTCCTAAA GGGTTAATGA GAAGCCACCT
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCCCTCCC CTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC
ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCCTCTCCA
CCTTAACACC AA

SEQ ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGGGGGGCGA CCTCATGCAC
CGAGACGAGC AGAGTGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCGCTACC TGCTGGACCA
CGCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGCG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

CACTTTACTG AGTCACACCC AGCTGTAAAC ATGTCACCGT GAGANTCCCG CCCCCACCC CCAGGCCCGCA CAGTCCGCGA
TGAAATGACA GGGGAGCGGG GAGGGTCGCC GGAGCGGGTG CCAAGCAAGG CAGGGCAGGC AAGTGCAGCA GGCGCTGAGT
TTCCGGGAGG AAGCCCGGAG GAGGTGGGGT GGGGCAGGAG CGNGGGCTGG GGACCGGCC GAAGACCAGG GGGCCAGGA
AGCCTCTTTT CCGAAGGNCT T

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTGCGAGACT ACGAGACGGT GGTCTAGGTG AAGCCCCATG ACAAGGATGC CAAATGAAA TACCAGGAGT GCAACAAGAT
CGTGAAGCAG AAGSCCTTTC AGCGGGCCAT CGCGGGCGAC GAGCACAAGC GCTCCGTGGT GGA CTGCTG GACATCGAGA
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGACGGCAA GTGACAATCA GTTTCATGAA GGAGCTCATG
CAGTGGTACA AGGNCCAGAA GAAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC
ACCTCTTTCC TCCCCACAAC CATTTACTGG GAAGTTGTGT ATACTTGGCA GTNTGGGAGG AAGGTACTTG GAAGACCCTG
CCAGCCATCT CCCACCCAGA CTTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA
GACAAAGGGC CTTCTTNAAG GAGAGGAGCT GCAGAGAGGG GCAAAGGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCCAAGGTC ATCCAGTCCG TCGCTAATTA TGCAAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAAA CAACATCGAA GATTGCGGTT GTTCTGGAC TCCAAGCACC
CAGGGCACTA TGCCGTCTAC AACCTGTCCC CGAGGACCTA CGGGCCCTCC AGGTTCACCA ACGGGTCTC CGAGTGTGGC
TGGGCAGCAC GCGGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNTGGCTGC GGCAGGACCA
CAAGAACGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

412

CCAGATAGAG TTTCTGTTTT TNAGTTTAC ACGTGCCACA TCAGG3AAAG TTAGGTTATG ATTPAAGCAA GAGATGATAG
 ATGAACAAAC AAAGAAACAA CAACAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA
 TTGGACAATA CTGATCAAGA GGGGTTTACA TTGAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATTT
 TGGCCCGGTA CGGTGGCTCA CACCTGTAAT CCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGATTCCG
 AGACCAGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAAATACAA AAACCTTTNC CGAGCGTGGG CCGGGCGTTG
 GTTGGCTCAT ACATTNAIN CCCCNCCTT NGGGGGCCCA NCGGSCGGT TCACCTTAGG GTCAAAGGGT NCGGGNCCT
 TCTTGGC

SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GGTGGTGAAG TGGGCTCTGG AGAAGCTGGA GCTGACCAAG TACGCAGACA AGCCGCTGG CACCTACAGC GCGGCAACA
 AGCGAAGCT CTCCACGCCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCCACCAC AGGCATGGAC
 CCCAAGGCCC GCGCTTCCT CTGGAACCTC ATCCTCGACC TCATCAAGAC AGGGCGTTCA GTGGTGCTGA CATCACACAG
 CATGGAGGAG TCGAGGCGC TGTGCACGCG GCTGGCCATC ATG

SEQ ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG
 GGAGATAGAT AGTCACAGTT CCCAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATTC
 ACCTGNGAA TTTTCTCTCT CCCTGCCCT AAACACTTTA TTTCCATCAC AGGGGAGAAA TNCCTGTGAG AAGG

SEQ ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTTTAAAGTG TAATAATATG ATTTTAAAG AGAAATTTAT TACTGTGTC AAAGGTCTTT TTAACCAGT TTAGATTCA
 AGAAAAATA AATGGAATC ATCGAAATT CATTTACAT TAATGGTCTA AAAATAAACC AAAGGACATT ATGTGTGCAT
 GTGTGTATA GTGCACACAG AAATATATAT NCATATGNG ACTATATACA TGTGTGTATA TATGTGTATA TATACATNCA
 CTTGTATAAA TGTATATACA CATATACCTA TAATGTGTGT ATGTG

SEQ ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG
 CAGAACTGTG CTTGGSGSAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AAWCTCCCC
 AAACCTAAA GGCATCCTTT TCGTAGTGTG TGTCCAYAG GTATGGCTGC TGAGCACCAG GGGTGTCTCA CCATGNTCCC
 AAGAAGCAGA GTCANGGAGG CAGACAGCAG GGTATTATTA GGTGCACA

SEQ ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAATAAA AGATTTTAT TGTCTATAG AACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
 TTTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
 GATCAGTAAA AACATGCAA AGTGAGAAGG AAAGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGATGG AATTTCAGAA
 CAGAGGAGGC AGGGTGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA
 GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGTTC GTCCCCCTGG ACGTGACTTA GCACTGACCT TGCCCTGCC

SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGGTTTATT TTATTAGGAA GGAAACAACC AAGCACCCCA TGTCCTGCC CGGACTCCC GGGGGGAACA
 TGCCAAAMAG CCGGGGATCG AACCAGCCC ACCTGTCTGT GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

413

ACTTYYTATT GTTAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGTTAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT
TTCTGATCAA CTGATGATTC TRACCCGCTT CTTCTCTCT GGGGGGTAAG ACACTTGTGTG TTGAGCTCTG GGGATGATGG
AGAACGACTC CTCGSCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCGTGGG AAGAATCACA TTGCTTCTC CCTCTAGATG
GCGTTCIAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TCCCAGACCC ATCTCTAAGT
CCTGGAGAAG ACCCAGACCT GCCTCTCCTT GATGGAGTTC TGGTAAACCA TCTTTTCAIT CAGGAGAAGA TGCAGACTAC
TTCTT

SEQ ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRAATCATA TGCTAGTTTA TTATCTTAT TATTGAGAGA TAATTTTCATG ATGACAGITA TCAATAATCA ATTACAATAT
CAAGAAATTC AAAGAACAAA ATCTTCGAGA GACTATGCTT TTGTATTTGG ATTTAAAAAG TATGTGATCT CATTTTCACA
TACCAAGCTG AGAGGCCATT TAGACTATCT CTTTGCTAAT TTTTGCTTAC TGCTGTAGGG AAGAAGATT CCAATGAMCT
TTAG

SEQ ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTTAAA AATAATAAAA ATTCACATATA TACACATATA AAGAAATAAA AAGAAGTCTC
AGTTCAGCT ATTTGTCAAA ATTAATATCC ATTTCTWTTW ATATACGGTG AATATTGCGC AATTATAGAT CTGGATTTTA
AACCACTTAA TGAAGCGGCA ACACCAGGTG TTTTAAGGTG TTGGCATTCT TCGCTGATTT GGCTGTTCCT AATGTTTACA
TTATTTAATC TTGCAAAAAT GGTTCGATG CACTTGGGAT GTGAAATGCT GTCCCGTTT ATTTTTTAA TGTGTATATC
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTTTATATT CCACAGTCAG GTGGGTCTGC GATASTCATT TAATGTTAAA CGCCATCAGG GGCCTCTCCT CCCGTTTCTG
CCAGGGGCTT TTCTGTCTT CTCCTTGGTC ATCATCATCA TCGTCTTCCT CTTCTCTGTC GGCAGATCTT CTCTGGTGGG
GGCTGCTGC TGGCTCCGAG GGGGCATCCG CAGTCCGTCT GGTGCTCTCC TCCTGCAGGC TGGGCAGCTG GCCACCACTT
CTCCGACTCG ACCCTCCAA CAAGCATCGC AGGGCACTGT CCTGGGGGT ACAGACCGTG GTCCACATT CGCTACCACT
CTGTTCCAG NCATCCAGG TACACGAGCT GCGTGTAGGC CGTGTCTCT TGGGGCTCGA GGCTCTTTCT GCTGGTGTCTC
TTGGACGGGC GGGTAAATTC T

SEQ ID NO:1904: (Length of Sequence = 423 Nucleotides)

GTCTGTGGC CCTGTCTGAA GTGACGGTGC AGCCAGGCTG CTCCTGCCC AGCAACCCG AAGCCATTGT GCTGGACGTC
GACTACAGT NTGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT
TAGTGAACIT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA
GATCTCCTGG CAGGCAGCCA TCTTCAAAC GGGAGACGAC TTCGGGCAGG ACATGCTGGC CCTGCAGATC ATGACCTCT
TTCAAGAACA TCTTCCAGCT TGTGCGCTG GACCTCTTTG TTTTCCCTA CCGCGTGGT GCCACTGCCC CTGGGTTCGG
GGTGATCGAG TGCATCCCCG ACT

SEQ ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACCAGA ACATTTTAC TCTTTGGGCT CTGGGAAGGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAGCAGA
GAGGAGCTAC AGGGGGCTGC AGTCCTAGTA CCCTGTGGG GAGGACTGAG GGATGGTGAG TTTGGTCTCC GGAGGGGGCT

414

CCAGTCCTGS TGCCAGTTC TNACANCTGC CCTCCTGAG TTCACACTGG AGTCCTTGCA GTCTGAAAC CACAAGGCCT
 NCCTGAACCC TGGGTCAGGA GAGAAANACT TGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT
 CCTGGGGCTT GTGTCTTTTC CTTGGCAGAA GAGGSCACAG CCAAAGGCAA

SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCTT CATTCAGTGA GGAAGAAATG CTTTCACTCT GGAATTAC AGCATCCCAA TCTGACGTG TACCGTGTG
 ACACTGTTTG TGAGCCCAA GTTCAACGA GCTCTTGCAA GTAAACGGAC ATTGTCACA TTTGTAGACA GCTGTCTTC
 CAGATAASTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC
 CTATTCATGA ATCTNCTAA TGAATCCCT TTGGTCTCCA ATAATTGTT GCCATCTGAG CCCATCAGT GCTCTGCAGA
 CAGGCTGAT GTCTGGTGAT CCACAGCACT TAAACCATTC TCACTTGTCT ATTTCAATTA ACTCTTCATC AGAACTAGAG
 TCATTAGCAT GCTGT

SEQ ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAATCCTG TACGTGTCAA CTTTGAAATG TATGTGTGT GGTGGGTGG TGGTGATG ATACGGTTG GATGTCTGT
 CCTCCAAAT CTCATGTTGA ACTATAATCC CCAATGTTCC AGTGAAGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG
 GATTTCATCTG TTTCTTCAC TTCCCTTGC ATCTGAGATC CTGCTGAAA CCAC

SEQ ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCAGATGT CCCAGCCTG TNAGTGGCC TCCTGGTGC ACTGTCCCG AAACCCCTGC TTGGGAAGGG
 AAGCTGTGG GTGGCTAGG ACTGACCTT GTGTGTTTT TTTGGGTGGT GGCTGGAAC AGCCCTCTCC CAGTGGCAG
 AGGCTCAGCC TGGCTCCCT CCTGGAGCG GCAGGGCGTG ACGGCCACAG GGTCTGCCCG CTGCAGTTC TGCCAAGGTG
 GTGTGGCGG GCGGTAGGG GTGTGGGGC CGTCTTCTC CTGNTCTTT CCTTCACCC TAGCCTGACT GGAAGCAGAA
 AATGACCAA TCAGTATTTT TTTAATGAA ATATTATTC TGSAGGCGT CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG
 ATCTGCGGG

SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAATTTTA TTAAGGATTT CAGTTACAT ACTTCAAAT TCTAGAATGG AATGGAATCA TTTTGGAACT
 GGAAAAATGG CATAAAGCT GACGTCCCTT AAACTTCAA TTTTATAAG AAAATCTTC TGCAAACCAC ATCCCCTTTA
 TGTAACAAGA CTAGGTATTA TCTACACCTT CACTTTGGCA ATAGCTATTT CCTAAAGAAT GAAAAAGATG ATTTTNTTAC
 TTCAGTTCAT TAAAAATGG ATTCTATCTT TGAAGTTCAG AAAAGCTGC ATTTGATGA ACTATGGGT AAAAATAA
 GCACATAGTG TCTAATCAA

SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCAGGGA GCACCAATCA CAGCAGGGC TCTGGCCAG GTGTGGCAG CCCAGGCCTC CATTTGCTAA TGATTAATAC
 ACTGTTTGG CTGGCAGTT TTTATGCAT GCAGCTTGAC GATTGAGCAC AGTCAGGCT TGTATTAATA AATGAAAAAT
 GAAAAACAA ATTCAAAACC TATTCAAATG GGTCTAGTT CAATTTGTT AGTATAAAT GTCATAGCTG GTTTACTGAA
 AACAAACACA TTTAAATTTG GTTTACCTCA GGATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC
 CACTGGTAGG ATGGTCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGG ATGCCCGTGT
 ATGTTGGTTT AGCGTTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

415

AATGCACCCA TTGGGCTGCC AAGAGCTTCT CACTGCCTTG CTAGCAGCCT GCCACTGTNC CCTGGCAAAT TGAAACCACC
 CACGCAAACA CTCAAAACCC CAATCTCCTT GCTAATAAGA TACAACCACT TAACACCGTG AAAAATGCAC ATCTCCAGCC
 TTCAATTCAA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA
 CCAGTACCAG ATGTCTGAGT TTTGGTTACA GGTITATAAT TAGACACAAA ATTCACTCCA CACTGGAGTT TTACTTTCAA
 GCTGGAGTTA GCATTAGTTC TA

SEQ ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAACT TAAAAAATC TGGAACAATA GAACTGTAC AGATTGATC AATCTTTTIG TTTTGTTTTT
 AAACTAAAAT CTCTAAACAC ACCAATGTCC CATTCCAAAA TATTGCACAA CATTCTGAAT AAAAAACCTT TGATTGTATT
 CCTCTNCAC TAAAGAAAAA AGTTCATGAC CCTGCTCCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC
 CCTAGGGAGA AAAGTAGAGA ATCTATAACT CACTGCAITG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT
 CAGANGNIA ATCCACCTTT TGGATTGTIT CCTGGGGAAA GAGGGGTAGA TAGAGGGATG

SEQ ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAGT TTGCTCGTT GCCCAGGCTG GAGTGCAATG GGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC
 AAGCCATTCT CTGCTCCG ACTCCGAGT AGCTGAGATT ACAGGCATGT GCCACCAGC CCAGCTAAGG CTTTGTATTT
 TNAGCAGAGA TGGGGTTTCA CCATGTGGC CCGGCTGGT TCAAACTCCT GACATCATAT GATCCCCCG NCTCAGCCTC
 CCAAGTGCT GGGATTACG GTGTAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTTAGG GGGACGATCA ATGAGGATTC
 TCTTCTCTGA GTTACTGCAT GTGTACAGT TTATAATCT T

SEQ ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGGCCCTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA
 GAGACCTTTA TCTTCCACC ATGGAAGACA TTAAAGACGA AGCAAACAAG TTCACAATTG ATAAAGTTCC AAAAGGTCTC
 ACAGTAGTAA CCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGTGT TGGAACTGCT CTGCCAAAAT TTGCCATCCG
 AGGGATGCTG AAAACCTTTG GGCTTCATGG AGTGTCTTA GATGTTGATT CAGTGAATGA ACTGGTGCAG GTAGAAACGT
 ACCTCCGCAG TGAAGGTGTG CTGGTGCGAT ACTTGGTATC CTATTTGACA TGTTGGGAAA GGGCCCCCAG CAGGCTACCG
 AARGGACTT

SEQ ID NO:1915: (Length of Sequence = 402 Nucleotides)

ATGGTTTATA GCAGGAATAC TTGTCTGAA TGACTTGGAG GGAAAGTGTG TGTTATATG TGTGTGTGTG TGTTTGTAG
 TTTTGTGAG GTAGGGGAGA CTAATTTTGT GGTTCAGTCA CTCCAATTAT TGCCACAATG CACTTTCCTT CATAACTGCC
 CCACCAAAGG TCTTAAAGC CATTTTGGG GCCTATTGCA CTGTGTTCTC CTACTGCAA TATTTTCAATA TGGGAGGATG
 GTTTTCTCTT CATGTAGTC CTGGGAATTG ATTCTAAGGT GATGTTCTTA GCACITTAAT TCCTGTCAA TTTTTTGGT
 CTCCCCTTCT GCCATCTTAA ATGTTAAGCT GAAACCTGGG NCTACTGTGG CTCTAGGGGG TAAGCCCAA AGGCCAAAA
 AA

SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TTTATTCTGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTGGGGGG
 ACAGAGGGGA GGACAGGGG TCAGCCAGGG GGACCGTGTG TCTTCCAC GCAGGACACT GTGCATGGGG CTCTGGGTGC
 ATCTGCCCAT CTGTCTATGG GCTGTGTGT GTGTNAGAGG CCAAACACAG AGAGCTCCGT GGGTCTGTGT GTATCCAAGT
 GCTAAAAGGC AGGCTGGCTT TCTGGGGCCC ACAGCTGGCG GGCTAGTATC CTGGAAGGTT TCACTTGGTG GCTTGGCCTA

416

GGGACCAGCA AGGGCTTGGN GTTGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

SEQ ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAAACTG
 TCATAGAAAT AAACGTGATA TACAACAAAT AAATCAATGA TTGTTAACTT TTTTAGACAG TTTGAATATC AGATTATAAT
 GAATAGCATT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAAT TTTGAAATTT
 TGGACCCAAA ATTATGTCAG TAATTTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC
 AGAAACCGTC AATTAAAGTG TACCCACAA GTGATACTA GCTACCATAC AAGTT

SEQ ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGTGCAGA ATGTGATTAG TTTATTAATC ATATGTGAAA ATATTAGTAG CTACATATGG
 CCAGAATAGA TTTTYCTCTC TACAAATGTA AGTTAGTGTT GATAGAATTT GTTATGCGAT ATTTGGTCTT TTGGTTTCAG
 TCTCAATGCT TTCTTCITGG CATTTTCATG ACTCTGTAAA TTAACCTCAG CATCAATTTT CTTTTAAATT CAACAGTTAT
 TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGTTAT CACTTTGGGG GTACACTTTA ATTGACGGGG TTCTG

SEQ ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTTTAT TGTCTATAG ACACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
 TTTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
 GATCAGTAAA AACATGCAAA AGTNGAAGG AAAGGGAAAA AGGTGCATTC CCTAAGCTG AGGGGGNTGG AATTTCAGAA
 CAGAGGWGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCC

SEQ ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGTTTAT TTTTTATTT ATGTATTNA ACTGACTTAT TTKTGTATCC CACTAGAACA ATACATTCAC AATATACTTG
 CAGAACTKTG CCTGGSGCAT CAGGGGAGCA GAGAACTTTT CCAGTGAATA GTTTTGAAG AAAGGAGTAA AATCTCCCCC
 AAACCCCTAAA GGCATCCTTT T

SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACCGC AACCTCCGCC TCCCAGGTTA
 AAACGACTCT MATGCCTCAG GCTCCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT
 TTWAGTAGAG ACGGGGTTTT ACTGTGCCAC ACAGGCTGGT CCCGAACCTCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC
 TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATGCGGGG CCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCAAC
 CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

SEQ ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTGG ACACAGATGA TTTGCCAAG AAGCGGCCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTTGCATAT
 CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGCGTA AAGATGCTCA CCCAGCCACC AGTGCTCTG CCGTCCATAA
 GTGCAGTGIG ACTTACCCTC TGAGAGTGGC ATCTGCTG

SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TTGATTTGCC TATGGTGTGA AATCCTTTGT TATTTTTCTA AAAAAATAAA ATTTAAAAAG AAAGAAAACT AAGGAAGAAC
 AAGANGCTAT TTACCCAAAG TGAGCTTINCA GTTTTAGTTT TGCATGGCTG TTGACTGCC TTTCGGCCTT ATGAAAATCA
 AGAAAATCTT TTTTAAAAAT GGAGTCTGTC TATTTTCCAC TCCTTGCGA TAATACAAAT TCAGTTTGTG AGGTGTGATG

GTGAGTGGG AGCTGTGATG GATCTGTGG CGGGTTTTGG ATGTGTAAAG AATGATATAT ATA

SEQ ID NO:1924: (Length of Sequence = 231 Nucleotides)

GTCTTCCCTG ATTCICAACC TTGCAACCT GCCTTCCGTC ACTGCTAGGT CCACGTAGGC TTAACCTTGA TCTTATATGT
AGGACCGGTC TTCACCTTAA GCAAGAGAAA TGTAAGAAGT GNTTCCCAA CTCAGTTGCT GGCCAGCTT TGGCCTCGTG
TTCCCTTCT GAGGACTGAC CTTGGTATT GCTCTGGAGT CTCATATCCC CTTGGCCCT AACTGACCAC G

SEQ ID NO:1925: (Length of Sequence = 249 Nucleotides)

GTITTTACTT AACCATCTTA TTGTTGGGAA TTGGGTTCC ACTTTTTNT TATAGATAGT GGTGCACTGA ACATTTTAA
ATAGCTTTTT NCTCAGTGT AATTATTCC NTAGAGAAAG TTACCAAGAG TGGTTTTACT AGTTCAGAGG GCTTCAGGAT
TTINATGGCT CTNCTAGCG GTGCTCTATT ATCCTNNAGA AGACTTGAT TACTCCAGT GTCAAGAAGG TTGNCCTCC
ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGTCTCTAA AATGGCCACT CTGGGACTGT
CIGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGCTCCCTT AGCGCTCCA GGCTATTAG GACGAGGAAA
TCCCGCCTA GTAAATTTA GTCAGACTGG TTGCTGTTT TCAAACCTG TCTCTGATA AGATGTTATC GATGACAATG
CATGCCTGAA ACCTCATTAG CAATTTAAT TTCGCCCGT GCTCTGCCAT TTGCCTTGIG ATATTTTATT GCCTTGIGAA
GTATGTGATC TCTGTGACA CAACCTATTC GTACANITCC TCCCTT

SEQ ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTTTTATGG GGGCGGATAC CGCAAGGGCC CGCCACGGT CAGGTIAGTG TCTGCTCTT GCAGAGGCGC KACAGCCTGA
CACCTCCACC TGCCACCGC CGGGGTTAG TGGACATGC AAAGCTCAGA GGGTGGAGGC AGGGGTGGTC GCTGCTGAGA
CCAGGGCTGN GTGCAACAGG AGGGTCAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCAA GGGGGCTGG G

SEQ ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCTGCTT CCCCTGAGCC CAGGTATGTA ATTCTACAC AACTGATCG AGCTTGINTG TGTGTGTATA TGTGTGTGTG
TGTGTGINTT AATGTGACAT GCATGTACTG ATCCNGAGAA GCCTTTATAC CAAGAAAGA GCTGGGATCT CAAGCCACC
CTCCCAAGAT CAGACAGCAG AGTGAACCAG GAGGCCACGA CAGGCCTTGT GTCARATGGC AGACGNTGCA GCAGGAAGCA
GAACCACGGG ACGGGGRNCA TGGGATGCTA TKGGCAGCCA GCT

SEQ ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGTA GGGAGAGAAT TTAATAAGTA AGGAGAGAAA GGAAAAGAA CAAACATGGA ATATGNTCAA GCAAATAACT
TCCAACAGAA ACAAGANGAT ATGTTTTAAA ATATATTTCC CTGCCCAAT AGTAAACTT ATTTCAAGCA CAATGCATTA
CTGAGGTGAA ATTAAAGTTA CATAAAATTG AAAACATCAC ACTGGANAAC ATTTATGCG GCTCAACTGA AGGTGGCATA
GTCCAGGAAG GCATTGGAC ATGATGGGG TGTTTCTTG TTGCCCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCACAGAC CGGGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT
CTGCCAGCAC TTGAGGCGG TGCACTCTGG CACCCAGTC ACCAACAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC
AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCCTCA TGATGTGGTG AACCACCTCA GCTGKACGA GGCCCGAAC

418

CACTACGGCG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC
GCGCAAGGTG CTGCAGGGCA CGCGGGCTGC CTGCACT

SEQ ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCAGTCCCC CACQCCACAG GATCTGCCCC AGAGAAAGTC CTCGCTCGTC ACCAGCAAAGC TTGCGGGTGG CCAAGTTGAA
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCCTGDC CCACCCGGGT CCTGTGCTGG NTCTTGCCCC
TTCTTGCTTT TGCAGCCAGG GGTGAGGAGG TGGCTCGGGT GTGGGCTGSA GAGGCAGAAG CCTTTTCTCTG TTGGTGTCCC
AGCACATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTTTGT TTTACCTTTT TTCCAAATAA CAGTTTGGAG
AAATATCAAT GAAATCTGGG GGT

SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TTTCATGGGT TTTTGTITTTG TTTATTTTGA ATACTGAAAA AGTCCTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC
CTTTCTCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAAGG ACASTACTTT TTAAAATGAT TAATGTTGAG
TTCTCAACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGCACT CTGTCTGTGC GGATGGAGTT TCTTTTATCT GACACCAGGT
CTCCAACCAC ACTGATGCAA GGCATTTTAT CTACAGAGCT CAACTAGAAC CCTTTTTTCA TTAGGCTACT CCAA

SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCTTCCTGC GGGACCACAG CTATGTGACT GAAGCTGACA TCATCTCTAC CGTTGAGTTC AACCACACGG GAGAGCTGCT
GGCCACAGGT GACAAGGGCG GCGGGTCTGT CATCTTCCAG CGGGAACCAG AGAGTAAAAA TGGGCCCCAC AGCCAGGGCG
AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCCGGA GTTTGACTAT CTCAGAGCC TGGAGATAGA GGAGAAGATC
AACAGATCA AGTGGCTCCC ACAGCAGAAC GCGGCCACT CACTCTGTT CCACCAACGA TAAACTATC AAATTATGGA
AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCA TCGAGCCCCA AACGGGTAAG
GTAAGCCAAG GTTTTAAATGA CCAGCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCCAT CACATACTYA CCTTGGGAGG
CTGCTGCACG GGCATCTTCC YGATGCTCAC GGCACITGGK GTAGGTTTCA RGATCGCCTC TTTGAGGAAG GACTTCAGG

SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTTT TTTCCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC
ATGACCCAGT TGAGGTGGTT GTNTCCITGA GTCTGTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA
ACACAAAACA CCCAACAGGG ATGCACTCAA CTGTGTGGTT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA
GAAGGGGGCT ATGGTGTGTC TGCATTCACT CCCCTCATAT AAAGCCACAT GGATCTAGG GGGGTATCCA AGAGCTCTG

SEQ ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTTTAC AAATTATACC TAATGAGTAA AATTAGTGA AAGTGATAAC ATGCTTCTAC CTGTATTTCT AGTGACCCCT
TAGCGGCAGG TATTTATACC TGGTATTTAT GATGCAGTAT ATAAGTGGT AACATAACT GACAGTATG TGCTTGCTGT
ACATGCTG GCTTTTGAAA CAGATTTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATTTAAT TTTATTTCTA
GGGCAAAGTA GACAGGGATT ATTTCTTGA ATCTATTTCC AAATTAATAT TTTTCTTTT GGTATTTCTA CACTTTAAGG
CCATTTGGTG CAATTTAGAA AGTGTGGCC TCCCTCCGC TAGCCACATT CAAAATTAAAC TTCCAAACC TCAGGAACAG
TACAAGGAAT TTGAA

419

SEQ ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACCTCTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTC
 TCCTGTCTCA GCCGCCCAAG TAGCTGGGAT TACAAGCACT TACCATCAGC CCCAGCTAAT TTTTGTATTT TTAGTAGAGA
 TGGGGTTTCA CCATGTTGGC CAGGCTAGTC TCAAACCTCT GACCAGCGGT GATCCACTCA CCTCGGCCTC CCAAAGTGCT
 GGAATTACAG GCGTGAGCAC CGCGCCAGC CTGINTTTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA
 ATGTACCTTA TTACAAGTAG CTAAATTTCC ACATAGAGGG NTAAAAAGAT TGGGAATCA GGTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GGCCTCCCTG TCGGGTGCAA TGCACTGGCT CAGATCATAG CTCACTGCAG TCTCGAACTC CTGAGCTCAG GCAGTCTACC
 TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG
 CGCCCTCGT TAGGACAGAA CCACGGTGCC CAGAGCCAGG AAGCCGCCCT CCTGGCGCCC AGCATCTGAG CTTCTACAG
 TGATGGGCGG GCTCAGGAGA GGACAGGAG TCGTGGTGA AGTTCACAG CTGGCCGCGT GGGGGGGCCC TTGCACCGCA
 CTTGCCGCCCT CTGACTGCC CGATCCCCG CAGCCCTGT GCGGATTGC ATTTYCTCC TTTCTYCCAG GGTACTGGCC
 CCAGCAA

SEQ ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACCAATT AATTTTTTGT ATTTTCAGTA GAGATGGGGT CTCACGATGC TGTCTGGGT GGTCTTGAAC
 TCCTGAGCTC AGGTGATCCA CACTTCGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCG GCTAAAAGAA
 AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGACG TTACGTGAAA TAAGCCAGGA ACAAAGACG
 AAGGCTATAT GAATCCACTC ATATGAAGTA CCTCGATTAG CCAATCCAT ACAGAAAGTA GAACAGTGGT TGGCGGGG
 AGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTTTT TAGACGGAGT CTCGCTCTG
 TTGCCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATCCATCCCC TTGCCCAGG CCTCATATGC CCGCTCCCC CAACCGGTCC TTCCCCTTGG GCTGCCGGTG CAGCTGTGGG
 CCCAGGCTTT GGCAGSCCA GCTTCAAGAC AGTGGGACAC AGAAAACACT TTGCAGCATC GCCTCTCCCT CCGCCACACC
 CAGGTCAGCA GAGATGGGCC CCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGGC AGGGTTGGAG AGGAATGGAG
 AGACATGTCA CCTCTATAGA AACGCGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCCGAAA
 GAAGAAAAGA GGAACACGGC AGGGGGTTCT KGGGGAGGAG GCCTCACAM CACCCCGCAG ATGAGCGTCT TCACCAGAA
 GGTGTCCTC GAAGTKGGG T

SEQ ID NO:1941: (Length of Sequence = 377 Nucleotides)

GTCAGCTCTA GAGGCACCT GCATCATGCC CACCAGGGT ATCCCCCTGG GATNGACCAT CTCGGGATAT GAGGCTCGG
 AGGCTGGGGT TGAGATTGG TCCTGAAGAG CTTATAGCCA GATTGCCACA TTCAAGTGTA AGTCCAGGAA AGGGGAGGC
 GGCAGTGCAC AGGGATTAT CAGTCCAGA ACCTCACAGT GATAAGAGGC TTAGAGAGC ATCTAATCGA GACCTTAAAT
 TTTTCGGGGA GAGCAGCTGA GGCCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG
 TGGTCCANCA CGTTGTGTT CAGTTGAAG CAAAGGGCTT GCCCGTGATT ACCTTCC

SEQ ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAATTA ACATTCTTTA ATAAAATTCC TATAGAAAGC TCAGTCATAG GGCAAATACT
 CATTTCTCTT TCCCATATCA CCGAGGATTG AGAGTCCCA ATATTCTTTG GAGAAATAGC AGTAGTTTTG CTGGATGTTG
 CCAGGACTCA GAGAGATCAC CCATTACAC ATTCAAACCA GTAGTTCTTA TTGCACATAT TAACATTACT TGCCCTAGC

420

ACCCTAAATA TATGGTACCT CAACAAATAA CTAAAGATT TCOGTGTGGC GTGAACCATT TCAATTTGAA CTAATATCCT
TGAAAAAAT CACATTATTA CAAGTTTTAA TAAATACAGT AGAGAGCTGG CATTTTCTA AATACTGGAT TTCAGATCTG
G

SEQ ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAACTT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG
AGAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTATCTC TTCTCTACT
CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTCTGATTC TGCACTCAT TTCCTTATGG CAACTACAAC
AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGTGGGC
TCACTCACTC TGGCCTGCGC ACTGGGGTGG T

SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

CCCCAGGCTG TCTCAGAATC TTGATGGGGT GGTCAATTGAG CTCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG
GCAGTGGCTA CAACTCGGAC CGGCTCTGCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG
AGCATTGGAG AGAACATCTT CCCTGAGGAT CCCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC
CCTCTTAGCT TCAGAAAAAC TTGATCGTAT TGGGCGCTAC CTCTTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT
ATGGGTACGT GTGCATTGCT ATGGAGGCTT TGGACCAGCT GCTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTCGTG
GAGAGC

SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAAATTGTG AAATINAGAA TTCTGCTATG ACAAGTGGA AATTGAGAAA AGACGCAGAG CCACTTTTIG TNATCGTGTA
GGTGACAAGG AGTCTCCCAA GTATATCCTG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAGCC TCCTAAAGTC
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATCTC CAGACTAAGC TGTATGSGGG AAGCCTACCT TTTTCAGCC
CGAAGTTCAG GAGACTGAGG ATGTAAGTGG GGACATGATC ATTGNITCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA
TAGAGCTAAT CTGAGTACCG CTTAAATTCA AGAGCCGTGG CT

SEQ ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCTCTNAC CCCAGGTTT AAGCAGTCTT CCCACCTCAG CCTCCCGGT AACTGTTCTT TGTAACCTCTC TCATCATCGA
GGCTATATAT TAATAGACAT GGTATTAGC CCACACGAAA CATTGAGAAT TAGAATTGGA TTAAGAAGAC GCGTTTGGC
ATCACGCTGA CTACTCTCA TCTCGTCTT CGGGGAGGGT GATGCCAGCG TGGGACTCTT TGGAAAGCCT ATCAATCACA
GGTGGCTAA AATCAAAAGG TGGGTCAGTA GGTAGGGAG GNGGCGCGA AAGGAGATGC CAGCGGTGT TAAGAAGGAT
ATGGTCAGAA GAGCTCTTTG TCTCCATCCA CGGGCCTCT GCTCAGCCCG TGTTGTCTCG GTGAGTAATT CGGGAGCAGT
GCACGGCT

SEQ ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTTGACA CTGTTACTAT CTGCAACAGT TCTTGCACTA GAGGATGCAC TTCAAAGTGC ACTGCTTTAC TGTCTCACTG
GAATTCIAAA AATCTAAGCT TTATCTTTTT AACATTAAGC TGTGTGGGAA TGTAGCAACC TCCTGGGTGG TGGGGTGGG
GGCATCTTCA ATTATTAGG TCTCACTGGA AAGTTTGAGA TCAGAGTTTG GTAGGTGGTG TAAGGGGACA ATGAGTAAGG
GAGAGAAAAT ACAGGACTGA CTGGGGGCAA AAAACGCTG ATAATAATTT GTGAAGCACA TTTTCAAACCT CATTATTC
TTACAAGGAT CCTAAGAGGC GGGTATTATG TCCNGTTAT ACCTGGAGGC TTAAATTGAA GGAACATCTN CAAGGGCACA
CAGTTTAATG AATGGCTGAG GTAGGA

421

SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

TTACAATCTG GCTGGAAACA GATAATTAGA ACATATCACC AGAAACAGAA CAGTTAAGTG CCAAGCTCTG GTGGAGGTTT
 TAAGTGCCAG AGGTCAGGAT ATATTTTAA GTGCTTCTGC TTCCAAACAT CACTCTTTCA AAACAAAACA CAAAGATCCC
 CAACCAGCAT TTCTGCCCCC TGAGGCACCA GCAAGGTATA TAAACGGGCT TGCAAAGTTT GATATACGGT CTCCAGCCTG
 GCTTTCTTTA GTCTGGGCTC AAAAGCCAGA AACCTCTGGG GGCCAGAGAA GCGCTCTTTG TTTGCCAAAC AGCATTCTCG
 CACATCCTGT TCTACAGCAC CGTCAGTTT

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCAATCCTG ATTTTATCCC AGCTGTGGG GATATTGATG CATTTCTTAA GGTCCCACGT CCTGATGGAA AGCCTGACAA
 CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCCCTA CGGTGCTCTC ACTCTGGTTA ACAGAGAATT
 CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACACG
 TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA
 CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEQ ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCCTAATCTT TACGAATGAA AGAAACAAT TCCATCCCTC TCACAAAAG GACATCTTTT AAGCTTTCTT CCCAATCTAA
 CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCACAG TGGTGTAGAT GCATTAACTC CCGGGGGACA
 GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCCTGCCCC
 CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCA GAGGGGCCAG
 TTCAGCCTTG AACACAGCAG TNGGGAGTGT CTCAGCT

SEQ ID NO:1951: (Length of Sequence = 336 Nucleotides)

CTATCTCCCC AATCTACGT TTCACATTT GACTGTAT TTTTTAGCC CAAGCCACCT TTATGTCACT CCTGGAACAT
 AATACTGCT TTCTCACTCA TCTCTACAT TTINACCTCT TATAATACAG TCCACCTGT ACCGAGCAAC AAGAGTTATC
 TTCTTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTCTC ACTAAAAGCG AAGTCTAAAA
 TTCCACCCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCINCGATC TTACCTATCT TCAACCTGG
 TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGTAA TTTAATCAGC AAATGCCCA TTTCATCTC TACCGGAAAG CTTTCAGACG CATTCCAGA TCAGACAGAG
 GACTAGGGTT AAGGCTGGGA ATGAAACACC AGCTAGTATC CCAGTGAGCT TTCCCAAACA CACATACACA GCAAGTCAGA
 CTAAACAACG TCCAACGTAA GACTCACCTC AAATACCTAG ACCTAAGATT CAGTCCAGG CTCTTTCAGA TACACCAGGT
 AAGTAAGCAC TTGGCATTCC TATCTCAGCC ATTCACTCA CAGAATCTTT TGGGTGCTA CTGTGTGCC AATACTGTGC
 TTAGTGGTAC TTGCCCTCAG CAGGAAAAA AATTAAAAGT GTTAAATGTT ATGAAGGAAC AGATTGGNAT AGGAATCACA
 AGGCATTGAG GTC

SEQ ID NO:1953: (Length of Sequence = 382 Nucleotides)

GTTCACCTCT TGTGCCCCAG GCTAGAATGC AGTGGCGATC TTGGCTCACT GTAACTCTG CCTCCGGGT TCAAGTGATT
 CTCTGCTC AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGCTAA TTTTTTGT TTTTGTAG
 AGACAGGGTT TCGACATATT GGCAGGCTG GTCTTGAAT CCTGATCTCA AGTGATCTGC CCACCTAGGT CTCCCAAAGT
 GCTGGGATTG CTGGCCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTT AATAGTGTCT CTAACCATCA TGTTTAGGGC

422

CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTGAGGAT TCCNTGAGAT AGTGTTTGAA AA

SEQ ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTGT TCCTGTTCCC TTGGAAGGC TGAGTGGGTG ATGCAGCACA
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTG ACAAAGCATA AAGGACTTGG GGTGAGCGT GTGTNTGGGC
TCAAGTGACC ATGCAAGTNC TGTCACTCC TTCCTAAGAC CCCATCCTTC TCCCAAGTCC TCCACAAGAG CTACCTTCTT
CAAAACAATA ACAGAAACAC ATCAAGNTTN GCGTCACTGA AATTGAAGIT CTGAATTCTG CCGTCACCCC AGCAACAGTG
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTTGAT GTCTTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCCTAACT CCACGGCTCA AGTAATCCTC CTGCCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC
CAGCTAATTT TTTTNCCTTT TGATTTTGG TAGAGATAAG GTCTACTAT GTTGCCAGG CTGGTCTGAA ACTCCTGGCC
TCAAGTGATC TGTCTTAGCC TTCTGAGTAG CTAGAAGTAG TTTTAATGAC CTAAGAATT ATGTGTTTAC CNGTGATTTT
ATGTGTTTGG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GTGTAATGTT CTGAGGGTGG CGAATGCAGG GCGCGTTCC TCCCGCTGC GATCTGGAAC ATCTTCTCGC CAACAAAGAG
CAGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCTGGAGATG AGCGGCTTGT
TGCGGCGTA CGGTTTCTC AGCAGCAGGG TCTCCGTGGG CGGCTCAGTG GCCAGTGCCA GGNAGGCAA CGTGTCATG
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCCTGCGT GATGCAGGCG CCTNTAAGC CACAATCAG
GCCACCAGT TGACGGTGAA GCTGGAACCT CAAGAATTIN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTTT CTTTITAGC CTGTGATGT GGTAATTGT ACTGATTGAT ATTTGAATAT TAACTGGCT TTGCATCCCT
AGAATATACC TCACCAGGTC ACTGTGACT AGGTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCAT
AAAAGTAGG TCAAACACAT CTGTATTAAT CAAAGTAAGA ACCATTACAA TCAACACAAT TTGCGCAACA AGAATAAGT
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAACCT TTGGNAAGCA CTTTCTGCAT CCTGCTGGTT
GTGGAAGC

SEQ ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATTTAAGTTA AACAAATTTT AAGGATGGTT TCCATCTATA AAATGGACAA AGTACAAGCT
CTGTACAGCA GTTCTTTTAA AAAATCAACT GGAAAAAAA ATTACCAAC TATATTTTGA ATTTGCAAAA CATACTCACA
GATACCATCA TCTGAGCTTT TATGAGNCA TAAGAAAGN CCACCACAGA GAAGACAACCT AACTTCGGCA CGCTTGCTC
GAAGGGCTCT TAGG

SEQ ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAATACGAG AAAAAACACA ACAGAGTAAT AAAGATATAA AACTTTCACA ATTAACACTC ATCAGTGTGA TAACTAAGC
CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAAACGTCT TTACTTTCAC TAAGAAGGAA CTGAAATTAA AGTCCTTAGT
CACTTTGGAG GTGGCTGCAA AAGCTCACA CATAGTTGAT CCTTAAATA ATTATGAATG GCAACCAGTG CTGCCCTTCT
GTACTCAACC ATGCAACTG

SEQ ID NO:1960: (Length of Sequence = 329 Nucleotides)

423

GACTACAGGT GTGCCCCACG ATGCCTGGCT AATTTTAAAG GTTTTGTAG AGATGGGGTC TTCCTATCTT GCACAGACTG
 GTGTGGAATT CCTAGCTCAA GCAATTTTCC TGCTCAGCC TCACAAAGTG CTGGTATTAC CGTGTGAGC CACCGTGCTC
 AGCCCCAGTCA TGTATTCTTA ATTATTGTAT TTGTGAACATA ATCTATGAAC AACAAAAACA AACAAACAAA CAAAAAGGGT
 GGCATTCTG GGCACCAGG GAAGGTGGGA TTGGGGTTGC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCCAGTTAG
 AGCGCTATC

SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCAC CTCAGCTTCC CAAAGTGGTG AGATTACAGG NTCAGCCAT CGCACCAGC CCAATTATTC TTTCTAAACC
 ATTTCTCTT CTGTGTCAT GCCTTAAAA ATAAAATTAA AAAAAAAAAA AAAAAAATC CTAAAAATT CTCAGGTGT
 TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCGAAC TACAACATA AACATGAT
 ATTATAGGCT AACTGAGGG ATTCTGAGG TTAGCAGATG CA

SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TGCTGGTGT CCTGCTGTCA TCCTCAGGAG GCCAATCAG TCCAGCCTC TCCACCATC TTCCCTGCAG CGATTCTTC
 GAGCTCGAAA CATCTCTGGC GTGTCTCTGG CTGACCACTC TGGTGCTTC CATAACAAAT ATTACCAGAG TATTACGAC
 ACTGCTGAGA ACATTAAATGT GAGCTATCCC GAATGGCTGA GCCCTGAAGA GGACCTGAAC TTTGTACAG ACCTTGCCA
 GGCCCTGGCA GATGTGGCCA CGGTGCTGGG ACGTGTCTG TATGAGCTG CAGGAGGAAC CAACTTCAGC GACACAGTTC
 AGGCTGAT

SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCGCAC TCCTGTGCCC GAGCTGTCTC ATCTGTGATT CACAGTCTGC TCTTCTGGC TGCTGTCTG
 GAGAAGTGAT TTAAACCCC GAGGTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTGTGA AAAGGCAAT TTTCTGCTGG
 GGACTGGCTT TACCCGCTT ACCTAAATCA TTTCTTACTG CCTCTGTAA CAGTCGCTT TTGTGTCTG CTGGNATTG
 TTTGAACACA GTCCACAGG TCAGTGGTIN CATCTCT

SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TTTTAATTCC AAGCAGAGTC CCCCTCCCC AGCATGGTCA CACACACAGT GGAAAGGGAT GTCAGGGTCT
 GGGCAGGAGC AATACCCAGA CCTGGGCAA AATATAGATA TCATTATATA CACAGTGGGA CTGGAAAGAA GTCAAGCTGG
 GGGTGTAAAG TAGGGCAGG GCAGGTGAGG AAAGCAGCTG GGGGGCCCC AATAAATTAC ATTCTTGAGA

SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CGCGTGGAT CCGAGAAGG CACAGCAGAT GCGCTTCCAG GTGCATACCC ACCTTCAAGT GATTGAGGAG AGGGTGAATC
 AGAGCCTGGG CCTGCTTGAC CAGAACCCC ACCTGGCTCA GGAGCTGGG CCCCAAATCC AGGAACTCCT CCACTCTGAA
 CACCTGGGTC CCACTGAATT GGAAGCCCC GCCCCTGGG GCAGCAGCGA GGACAAGGGT GGGCTGCAGC CTCCAGATTC
 CAAGGATGCA GACACCCCA TGACCCTTC AAAAGGGTCC ACAGAACAAG ATGCTNCAT

SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GTCCCTGCAC ATGCGTCTGG CAAGACGGT CAGCTTGTG GTCTGAAGCA GGAAAGTTTG TCTGTNCTTA GCCAGTAGCT
 TGGCCCTGTT GCGCTGGT GTGTAAAGAG AGAGACTTGT AGCTTCAGGT CTGGATAAAT NACCCCTTGA GTGTGGCTCC
 GTGGTCCCC GAGTGGCCCC CTCAAGCTGA GTTGGGGTCT TCAGTCCCC ATACTTCTTC CAGTAGATCC AACAGGAAGC
 ACAGAGGCGG CACTGCATGT TAGGTGGGCC CCAGGCATAC CACTGAGCAG ACTGTGTGGT GTGGCAACTC TCACAAGTCA

SEQ ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGTG CACAACGGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC
CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCCTTCCCCT CGCCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA
GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTTC CTCGTATTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA
CAACAACAAA ATAACATGTT TGCCTGTAA GTTGATATAA AGTAGGAT TCTGTA

SEQ ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCTTCA CTCCCTCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTTAAGAG GTGTCCAG GACTTTGGG
ACCTACTAAA ACAATGATGG TTATTTTAGA TGTGATGATT TATATTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT
CGATACAAA ATCAGGAGCA TCTTGGGATT TATTAAATTA TGTAAGAAGA TAGCAGAT ATCGGGATAT TATTGTGTGA
AAATGCTGCT TTTACTTTGA TGTGATCTCA TTGATGTACA CAACCAAGTT CCAATAAAGT GCTAGAATGT G

SEQ ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCTGATAC ATGCAATATG GTGAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA
ACACAAGAGA ACATGTTGTT ATGATTTTAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA
AATCAGTAAC TGCTGACAGG GGCAATGAG GNGATGATCT CAAGGGNACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG
ATCGNATTGG TGGTCACACA AGTGAA

SEQ ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGGTTG AGGCCAGGAG GCGGAGGTTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC
AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG
AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCCTGTCT
GCCTTCCTTC CCGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTCATCTC CTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATACTG CTGAGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TTTACAGAGA ACCAGGACAT
CATTTTGAAT ATAACCTAGT TCTAATAGT AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCTCGGA
AGCAAGCTTT CAATGTCCCC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG
TATTACTTAT TACCATTAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAAA GCAGAATAAT TTTACCTGAG AAGAAACCAG GAGGCTTCTT CTCTCTCTC TCTCTCTTT TTTTTTTTTT
TTTTTGACTA TACAGAAGAA AACTATCAGA GTTAGGTTAG AGAGTTGGGT TTGGGGTCAG GTTGTAGCAT GTGTATATT
ATGGGTAAAT TTGTGTCTC CCCAAAATTA ATATGTTGAA GTCTTAATC CCGTACCTC AGAATGTGAC CNCATGGGGA
AATAAGGTCA TTGCAATATA ATTAGGTAAA ATAAGGTGAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCGCAGT CATCTCAGC ACTACAGCA GGCCATNINC AAGCTGACCG CAATGCTCAT TAGCAGTAAA GATTGTNACC
CGCAGTCTT TCATCATCTG TNCCTGGGTC CCCTCCGGAT GTTCAATGAG CATGGCATGG AGACGGCCCT GGCCTGCTGG
GAGTGGCTGC TGGCTGGCAA GGATGGAGTG GAAGTCCGT TNATGCGGGA GATGGCAGGG GCCTGGCACA TGACGGTGGN
GCA

425

SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGGCAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC
 TGCCCCGCAA GACCCACCGA GGCCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTCGTGTAGC CTTCTCTGTG
 GCACGGGCTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTATAAG ATTGGCCAGG GCTACCTTAT
 CAAGGACGGC AAGCTGATCA AGAACAATGC CTCCACTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCCTGGA CCCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTTCTCT GCTGCAACCT ACCAGATCTG
 ACATCCACCT CCCCCAGCAC CCATGGGCA AGGAGGCCTG GGGCAGCCAA GGGGAGTTCC AGGACCAAGC AAGCAAGAAA
 CCGTTCTTTG AACACATGGT TAAGCTTCIT CCAGCATGGC CCTAATTCCC CTACCTGCCT AAGCCAGGGG AGT

SEQ ID NO:1976: (Length of Sequence = 162 Nucleotides)

AAGTGTTACA AGCCCCAGAA TGCTGCCCCG CCTGCCCCGC TGGGGGGACT GTCTGTGTGT CTGINTCTCT GGGGTTCCAC
 CTCCAAGCCT ATACCAGCTG TGTACAGCGC CATCTCTCTG CCTTCTGTG CCCCTCACTC ACCAAACAG TGTATTATA
 GC

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GGCTGAATTA AGAGCATCCA GAAAGCCCAG GCCCTCCATA GGCTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG
 CATTAGGTGT TGTGTGAGT GGCTGTGATT TCTTCTCTGC AGGGGGAGTG GCATCTCCTG GAGCAGCTAC GTTGCTCTGA
 CGTTTGAGGG GGATGGGTTT AAGGTGTGAC TTGTAGAAA CCACCACTGT GCTGGCATTG TTCTTCACAG GCACCAAGGA
 TGGTGTCTCC AGCTCTAGTC CAGTGGAAAG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TTGCAGGAGT TGCTGATATT TATTCAAAG TCATCCATAC AATAAAGAAC TCINCTTTTA AAATTCCATT TACATCAGCA
 GTTAAAAAA AGTGACAGTG GATGAAACAT GANGCTGTAA AGTGCCTTTA TGGGGAATNC AGCCACGCCT GCCTCCACTG
 TGCTGGG

SEQ ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGGCT ATGTACTATA CTCAGGAAAA CCATTIATTT GCACTGGAGG CAACTGTTCT TGAGAGAGGA
 AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTINACTA AATCAGTATG
 AGAATCCTGA TTCITCATTA TTATATCCCC AACACTCTAT CAGTTTGTG AACAAATCAA CAAATAAGCT TGAATAAAGG
 NTCCACATCT CAATTCTCCT CCACCATCT ATATTGCCCT TCATCCCTAC ATTAAAATGN TTATTTCTGC TTTTTCCTT
 TAACAATTTA TCCTAAAGT AACTAG

SEQ ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTATCT CACAGTTAT ATTTCAATCA
 TTTATATTAT TTTTAAAAA GGTTCCTTA TCAGCTACTA AACATCTCAG CAATTTGGTG TGCATAGCTC TAGATTAAGC
 AACAAAGAA TGTA

SEQ ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGNTCACTC ATAAGTTTTC AGTGGTTAAT TACTACAGTT TAAGAAGACG TGTGATTAT TTTAGATCT GACCCAGCAG
 ATCATACCTN TNCNTGAAT TACATGGTCT TCTTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCCT

426

CAAGCCCCCT TTGCTAGCTC TTCCTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG TTTTCACCCC
CTNCCNGGGT GACCGTTATA CTNCCAAACC TACAGG

SEQ ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTGTGNTCC AGGAGCAGGC TTTCCCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA
TCCAGGTGTG GCACAATCTC ATCCGACATG CGTGTNTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC
CTGGTGAGAA ATGGAGCAGG TGATTTGAAG ATCAGGGAAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC
GGGCAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGGCT

SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TTTCAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TTTCGTCTCG CTTCCTCGTCA TCTCATATCT
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCTGTGGCTT TAGGCATCTT TAGTAAAAAA GCTGAACAAA TCCCAAATTT
ATTCCCATTT TCTTGAGAAA TAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT
AATTTTATG TAAGTATACT GAATAACAT ACA

SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGSCTG CTCTGGCCTG GGACACCCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC
CCTGTGGGAG TNCGGGGGCA GTGACTGGAA TGTTCTGCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG
TGCAGCGCAN CTCATGGGTG CCCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCG T

SEQ ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTCGTTGCTT GGCTACAGC AAGTATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG
CTGCAATTCT ATTGGTGGTT TTCCCCAAC AGCAATAACA AGATGTTACC TGAAGCACA CCAGAGCCAA TCATGACTCA
GGCTGTCTA GATGTTTGA TGTCTGGAAA TATATTT

SEQ ID NO:1986: (Length of Sequence = 268 Nucleotides)

CACITGGACA TTCCTCTTTA TTGTTACAT TCCAACCCAG CACAGTCACA TGCACACAG GAGATCAGAA ACCTTTNGGC
CACAGCCCCA GGAGCCCGC GGGGGGGAGG GCGGGACCGA CAGGGGCGGG GCGGGGCGGT GGAAGACTCC TCCTACOGAG
CCTCCAGGC GNTCGGCGTT TGCATAAACA AGAGAGCTGG AGAGNTGCC CTCACAGTG CGCTGGGGAA AGGGGAGGGA
ACGTGACAGG CAGGTNNGG ATAGGGAC

SEQ ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCTCACTG TAAACAAATG AGGATGGAGG AACTGAGAG GNTCAAATAT GAAAGGCAGT ATGGGGAGTT AGAGCCACTC
GTCTACTCCT GTAAAGAGCA TGACTIONA CAGTCTTTCT AGCGGTTAGT CACTCTTTCA TTAAACAAAT ACTTAGTCCC
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA
TGTATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

GTGAGGGGGT TCGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAAGTTC AGTGATTAAC TTGGATCCAT CCCATGCTGT
CTTGAAGTGT TCAGGAATGG GAAATCTCT ATAATCACCA TCTGAGGGA TAAGTATGTT CATTTAGAT GACTTGGCGC
TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG

427

SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG
 GACATTCAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCA GGGCCCGGAC TCCTGGGTGT GGTTCATGAGA
 AGCGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCCGATGGA CCAGTTTATT GGATTCACCT ATGATACCAG GACTTTTCCA TTCAATTCAA
 TTCAACAAAC TTTTAGAGAT CGCCCTATT CCAAGCTCAT CCAGTTCTG CTTTCATGAAG GCAGGCTTTG GCATATCAGA
 CATAAAAGC TGGAGGAAC TGAAGATTCT TTTGTGGSTA AGTATATAAA GTGCATTCCC ACT

SEQ ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCAGT TTCGTGTTCC TGCAGCTCTA CCATTCCCCC TTCITTGGCG ACGAGTCAAA
 CAAGCCAATC CTGCTGCCCA ATGAGTCACA GTCCTTTGAG CGGTGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA
 CCCACAAGAT CGCGTCTCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCCAATGA GCATGGCTCC
 TACAGGTACA CGGAGTTCCT GACGGGCCTG GCGCGCTCA TCGAGCTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG
 AGGCCTTGAC GTNTGTINGT AGGACGGCCA GTTCACTIAC TNCINGCAGC ATGACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GGCTTACAGG ACAGAAAGGT CCCTTCTCAC AGTTTGGGAG GTCCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC
 CCTCTGGATG CTCCAGGGGA GGGTCTTTTG CCTCTTCCAG TTCTGGTGGC TCCAGGCAIT CCTTGCTTTA TGGTGGCATC
 ATTCACTCTT GCTCCGTCTT CACGTGGCCT TCTCTGTGTT GTCAAATCTC CTTCTCTGTT CTCTTGTAAG AACACTGTC
 ATTGGGATTT AGGGENCCACC CCAATCTAGA TGGTCTCATC TTGAGCCTTT ACTTTAGTTA CCTCTGCAAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TCGACGAGGA GAAGACCTTT TCATGTGTAT GGACATACAG CTCGTTGAAG CACTGTGTGG CTTCCAGAAG
 CCAATATCTA CTCCTGACAA CCGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG
 TGTACTAAAT GAAGGCATGC CAATTATCG TAGACCATAT GAAAAGGGTC GCCTAATCAT CGAATTTAAG GTAAACTTTC
 CTGAGAAATG CTTTCTCTCT CCTGATAAAC TGTCTTINCT GGAAAAACTC CTACCCGAGA GGAAGGAAGG GAAGAGACTN
 ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTTNGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT
 GAGGGATGAT GGACCATCAT CCCAGAGGT

SEQ ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTTGCC AAACCAAGTG CCCCTGTCCT GTGTCAGCCA GCTGTGGCAA TTTCACCCCT ATTCTTTGGA GAGGCCAGCT
 GCCTGCTGGA AGGAGTCAGA AGTCGGTGA TGTATTGAG GCCTTGGAGG CCCAGTNTG GCGGGAGAGA AATCCACACC
 TGTGCTGGA GTTCTCCTTC CCTGACCCTC TGAACCGGCG CTTAAAATGC TGTCCCGCCT GGAACAGGGA GGCCACATCC
 AGCAGTGCCT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CCGTTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT
 GATCATGCCA TCCCCATGA AGATATAAGA AACANCATAA CCATGGTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCTATAT GGCCATGCTC TGGCTCTACC CTGTGGGAAGC CTGATCCCGG TGTGTGGCCC AGCTTGTTCA GGCCCTGGGA
 TGCTGCATCT CCAGGCAACT ATGCACCTTC CCGGGGAGAG AACCAAGTATG AGAAGTGGGG GCAGGGCACA CATTCACTTT
 TGTACCTGCC TCTTTGGTTT GGACCTGGCC AGTCGGGTCA CTGCCTCCAC GTCTGAGGCC CCGCCAGCTG GCCGTCTGTC

428

CTGCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCGAAACCC CACCTOGAAG TTTCCTCCGTG
ACAGTGCGTC CGAGTCCACA T

SEQ ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCAATATGGTT GGTGAACAGT TTTCAGCCC TAGGCTCTG TACTGTGCGT GCACCGCCGC CCGGSCAGCC GCTGGCTCCA
GCTCAGAAA CAGCCCGGG CGCCGCGCCG CTCTGAGTCC AGCCTCTAC TGAGAACAGT CCTCCCTTG TGCGGGTCGC
ACGCTAGCC GCAGGTTCGG CCACGTCAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC
AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGGC TGGAGATTCG TGGCAAGGC TTCTCATTTT CCCAGG

SEQ ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGTTTAT GTTTTATTT ATGTATTTA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACTTG
CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGNGTAA AATCTCCCC
AAACCCTAAA GGCATCCTTT TCGTAGTGTG TGTCCCATAG GTATGCTGC TGAGCACCAG GGCTGCTAC CATGCTCCCA
AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCGCTTCT

SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TTTGATGCTA TGGCGCTGSA CCCAGGGCCC TCCAGGCCA TCTCTGTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA
AAGGGAGTCA GCGCATTTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTG CCAAGAAAT TTCCCTGTTT
GGAAAGTTTG CCCCAGCTTT CCGGGCACA CCACCTTTTG TCCCAAGTGT CTGCCGGTCG ACCAATCTGC CTGCCACACA
TTGACCAAGC CAGACCGGT TACCCAGCT CGAGGATCCC AGGTTGAAGA GTGGCCCTT GAGGCCCTGG AAAGACCAAT
CACTGGACTT CTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

SEQ ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GTGTGATTGA GTCACAGCT GAATCAATCT TCATATAATG CCATTTTTGC TTAAAAGAAT GCCAGACTTG
GGCATTAGGC TGACATTTTC TTGAAAACAG TGAGGCTTTG CTTTAGGGAA AATAGTGGTA GTATTTATGG TCGATGATAA
AGTTCCTAGA TTTTAAGCAA AAATTTTGA AAGCTGTAT CAGCTGCTGT AAGTATATAA TGAAATCTGT CATTATTTGA
TTATCTGCAT AACTGAGTCA GTATTTCCAA ATGATCAATG CATAGTATTA TAAAATCAT ACATGGGTAA GAAATCTTGA
CAAAGTGTC GCTAGAC

SEQ ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGTAGCCCC CTGCTGCAA GGTGCCATCT TTTTCTGCT GCTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG
NNTCATCATG GGAAGCCCA CAGCCACTGA CATCATGAAG CCCACACGGA GCATCTCCGT CACCAGGTTG GAGGGAAAGT
GCATAGCAC GTTTGCCGGC CGTGGCTCG GTGAAGCTGA CGTAGCCGAA AAACCCACC ATGACGTAGG AAGGTGGTGA
CCACATTAAG GGAGGAAGCA AATATGAGC TCATGGTTTT CACTTGACGG GTCATCCAG GCTGTCGTAG GTGGGCAGCA
CCTGGGACT

SEQ ID NO:2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TTTGGTAGGC TCCAGGATT TCCCTCAGCA GGCATTGTG CTGCCGAGG GCGTCTGGG TGCCCGCAG
GTCTCTCTG ATGCTCTGTA GCGTGGGTG GAACGACTCC CTCCTGACT GTGTGGCAA GCTGAGCTCT GCGCTGACC
ATGTGGCATT GGCCAGGATG GGGCCANGC CCGTGGGAT GCTTTGCTGC CCGTCTCTG AGGCACCGAC TGCTCTCTCT
CCCATGTCC CCAAGTGCTT CTTAGAGAC TCAACCTGNN TCCAGAACTC ACCATCCACT AGGACCTT

429

SEQ ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAG CCCCTGTGCC CTCTCCACT GCCCTCTTT CCAGACAGTA AAGGCCATGS TCAGTGTGTT
 TTTCTCTGT AAACAAACCC CAGCTGTGTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC
 CAGGGTTTTT CTGGGGGTTT ATCACCAGTG TGGGTCCCTT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA
 GG

SEQ ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGGNAC ACTTTTACAC TNCCTGGTGGG
 NGTGTAACT AATACAACCA CTGTGGAAAA CAGTGTGGCG NTTCGTTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA
 GCAATCCAC TACTGGGTAT CTACCCNNA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACACG TTTATAGCAG
 CACAATTTGC AATTGCAAAA AATATGGGGC CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT
 ATATATAT

SEQ ID NO:2004: (Length of Sequence = 211 Nucleotides)

AGCCTTTTA TTATGINTT TTTTTTTTT TAANCGAAGG TCCCTTACTG GTCCTGCTTC CATGAGTAGC CGTGACCAGG
 GGAAAAGGGA GAGGAACCAG CCGGCACAGG GAGGGGTCAT CTCCACAACA TTCCATTAT ACACAGAACT AAACAGACAA
 GCACAGNGTC ACTATTGCGG TTAGAAGTTG GCAGCATGGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

COGGGACACC GTGGGAAGG GGTGCAGGTG GGTGATGGC CAGAGGAATG ATGGGCTTTT NTCTGAGGG GTGTCCGAGA
 GGCTGGTGTG TCACTGCTC ACGGACCCCA TGTTGGATCT TTCTCCCTTT CTCCTCTCCT TTTCTCTTC ACATCTCCCC
 CATAGCACC TGCCCTCATG GGACCTGCCC TCCTCAGCC GTCAGCCATC AGCCATGGCC CTCCTAGCCC
 C

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CCTGTGAGT GGGCCTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA
 CCTAATGGAT TAAGGCCATC CTCGCCTAGG TCACTTACTA AAGATCAGGT CATATGTCAT ATCGTTCCIG TGCTTTTITAG
 AACGTATTG GGAATGGGTT CCAGATTTTT TTAAACACA TATTAAAGAT TATTATATT ATGCTTTGTT TCGAAAGGT
 TTTAAGGTGG ATTAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTCTGCG GGAGGCAGGT GGAGCACAGG GAGGGCTCCT GGGAGGCACA GGAGTGGGGT GGGGGCCAGG
 AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGGCC GGGCCACGC CCACCTCAAG AGGGGGGCG CCTCCTCAGG
 AGGNATCAAG GTGCAATCCA GTCTTCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC
 TTCTTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGNTCINTGG GCCACATGG
 AAGGTGCAGG GTCTGGGTCC CTGGATGACG AGGTGAGGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG
 GGACTCATGG AGGATNGG

SEQ ID NO:2008: (Length of Sequence = 360 Nucleotides)

CTTTCTGGA GAAATAATA CGCTCGTCC TCTAATTAGC CCATCGGTTT CAGGTTCACT ACTCTGCTAT CTCTCCTGG
 AGTTTACACA AGCCCTTCAG AGTGTAAACA CGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAGAACT
 GTTCAACAG ACAGGTGTTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GTTCTATAC GGTAAAGCAIT CTACCCCTCA

430

GCTGCCAGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA
TTACAAGCAA TTACTTCAAT GGTAAAGTCT CCACTCTAGA

SEQ ID NO:2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCGGCCACCA CGCTGGCTA GTTTTGTAT TTTTAGTAGA GACGATGTT CACCATGTT ACCAGGCTGG
TCTCGAATC TTGACCTCAA GTGATCCACT CGCTTCGGCC TCCCAAAGTG CTGGGATTAT AGGCGTGAGC ACCTGTGCCC
AGCCTCACAG CTGCATCTTA ACCTTACCTT TGCCCTCGCC TCTCAAGCTG GTACCTCCTA ATTTACATCC TAAGAGTGGA
ACCATGTGAC AAGGACTGGA GTGCCATTGG CTGTGSACTG TTCAGGCAGG GAAGTACAAG ACCACTCTTG TATTCAGGGG
CAACCAAAGG AGAGAATTAC GTACTTGTG AGTACAACT GCACCAAGCC CTGGAGACCC ATTACCACCG TTAACCTCA
ATACAGCTCT G

SEQ ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGG AAGCTGTGTG CACGCGGTG GAGGGTNCCT NTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTGAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCGAG GAGGGAAGCA CCGACCGCCC
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCTCTG TGATACAAG T

SEQ ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGG CACCTACAAG CAGAAAGGAG GCCAGGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC
TGCAGCAATT CTGTGTAGAA AGGGAGGGCA AGCTGCCAGA GCANTGTNGC CCAATATGAT GCCTACCGA GACAGATGTC
CCAGTAGAG TGTTTCACT GACCTTCTAA AC

SEQ ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCTT CGAGGACGTG TGCCGCTACT TCACGGACAT CATCAAGTGC CGCGTGATCA ACACATCCCA CCGAGCATC
CACAAGACGT GGGAGGAGGC CCGGCTGCAT GGCGCTGGA CGCTGCATGA GGACCCGCGA CAGAACCGG GTGGCGGCTG
CATCAACCAC AAGGACACCT TCTTCCAGAA CCCACAGTAC ATCTTCGAAG TCAAGAAGCC AGAAGATGAA GTCCTGATCT
GCATCCAGCA GCGGCCAAAG CGGTCTACGC GCGGGAGGG CAAGGGTGAG AACCTGGNCA TTGGCTTTGA CATCTACAAG
GTGGAGGAGA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEQ ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTTTATGG AAAAAAATTT CCATTTTNT TAAGAAATAA GGAGTTTNTG TGTCGAGGGC ATGACTACGA GAGGCTGGAA
GCTTCCAACA GAGAATGCTG AACGANTTCC CCCATGCCAT CGCCATGCAG CACGCAACC AGCCCGATGA GACCATCTTC
CAGGCAGAAG CTCAGTATTT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEQ ID NO:2014: (Length of Sequence = 333 Nucleotides)

GTAAATAAA ACAGCAAATT CTAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CTGTGCAACT
TTAAATTATA CCAAGTAAAG TACACCACCT ATCACTGAT AACATTTTCC CTACGTTGAA AACACAAAAC CTACTTATCG
ATATTTTGA TATTAAAAA AAGGACATTC ACTATTGTAG CCCTGACAAC TCTTCCAGTA TTTTAAACCA TTCAGATGTA
TTATGTGGGN ATATTTAITA ACATAATTIN GTTAAACACA TTTCTTCTA CACAACTGA ATTTTAAAG TGTCTATAAC
ATTTTCAATT ACA

SEQ ID NO:2015: (Length of Sequence = 179 Nucleotides)

431

NCACCACTTA TTGTCTTCAA ACATTATTGC ACTTTAACTT TCTTAATTG ACAAAGCATT CAAGAAACAT CTGCAGACTA
GTTTAAACAG ACAAATAACA CCTGTAAGCA GACATGACTG TCCTAAATTG TTTATTAAGA AAGTTAAAGN GCAATAATGT
TTGAAGACAA TAAGTGGTG

SEQ ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTTCCCTCC CCAGAGATGC TTTATTACAT GGTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG
GAACATCTGT GTGGTACATG GCACTGTTCC CCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGCTTGG
CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA
GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTTCTAGGG TGACGTCTCT TTG

SEQ ID NO:2017: (Length of Sequence = 504 Nucleotides)

CGCGTGCTGG CCGCGCTGTG GCGCGCTGC TGTGCGNCCC CAGNCTCCTC GTCGCCCTGG ATATCTGTTC CAAAAACCCC
TGCCACAACG GTGGTTTATG CGAGGAGATT TCCCAAGAAG TGCGAGGAGA TGTCTTCCCC TCGTACACCT GCACTGCTCT
TAAGGGCTAC GCGGGCAACC ACTGTGAGAC GAAATGTGTC GAGCCACTGG GCATGGAGAA TGGGAACATT GCCAACTCAC
AGATCGCCGC CTCATCTGTG CGTGTGACCT TCTTNGNTT GCAGCATTGG GTCCCGGAGC TGGCCCGCCT GAACCGGCA
GGCATGGTCA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCCTGGTT CAGGTGAAAT TNCNCGGAG GGATNTGGGT
AACANNNTT GTTACGAAGG GTGCCANCCG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGTGGCCT ANAGCTTAAT
TGGNAGGAIN CGNTTNTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TTTAANTCCA GACTTGGCAC ATGGCTAGGG ATACTGCTCA
CTAGCTGTGG AGGTCTCAG GAGTGGAGAG AATGAGTAGG AGGGCAGAAG CTTCATTITT TTTCTTCTCT AAGACCTGT
TATTTGINTT ATTTCTGCC TTTCCGAGTC CTGCAGTGGG CTGCCCTGTA CCTGAACCT CATGAGCCTC TAAGGGAAAG
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCAGN CTTACTGGGT
CCTTANCTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCT TTGAACTAT TGCTGCTGTT TTCATTTTAA AAAGGAACCT TTAATACTAA AATTATAGGA AGAACATAAT
ATCTGACGTC ACGTAAATTC AGATTGAAG GAAATTTACT TTTTNCCTT ATTGINCTT ATTTTCTCTC ATTTTGTTAA
GAACCAGCGA ACACTTTGAA GAAAGCCAAA AGTTTACATC TGGAGCTGGA GGGTCTGTG ACTGCACACC AGGCACTCTG
CCAGCCCTAC TCTGCTGTG AGTCTGCAG GTCACITGCC AGAGGTGGTA CTTC

SEQ ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACCT AAGTTTACA AGGAAAGTGG TCACITTAGT TCACCACTTT CCTGTGAAA CTTAAGTTCC AATGGGAGAA
TGACAGTAAA CAGACAATA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGTNAGATT TNCAAATCTG TAGAGAAACN
TNGGCTCATT CAATAAAAT TTTGAAACCA TTGATTAATG TCTTAATAAC TATATGT

SEQ ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTTCTTA AAACAACAGC AACGTGATCT TGGCTGTCTG TCATGTGTTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA
GGTTTAAACAG TTTGTGTGCC TGENGGAATT TTCTTACAGC GAAGACTTGA GTTCTTCCAA GTCCAGAAC CCCAAGAAATG
GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTCTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG

432

CCACGCGGCT NGTAGTGCAG CCTTCTGTGA CCCCCTINTG GTAAGTCCAG CCTTCCAGG GCTGCTGAGG GCTGCCCTCTT
GACAGTGCAG TCTTATCGAG ACCCAACGGC TCAATCTGCT CATCCNTAAA GTGGGGGATA

SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGSCAGTGC CTGCNCTGGG
AGGTGGCACA ATGTGCCAAG TGATGACGAT GACAATACT ATGAAAGGAT TTTATATTG CACAGCATTT GGTTCCTGA
TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCAGTAAA ATATTCAGGA TGG

SEQ ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCTTAAG TTTGCACTTT ACAAACCCAC AAGGGAGAAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG
GGATGGTAAA GAGGGGAAGA GGAAGACCCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC
CTCAGGCTAG CCCAGCAGGG TTCTGTGTG CTGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC
TCTAGAGACT GCCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

SEQ ID NO:2024: (Length of Sequence = 234 Nucleotides)

ATTTTGTGCG GGTTCGAAAC GTCTTCCTGC CTTGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT
TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TTNGTGCTGT TCATGTTTAA ACTGCAGAGA
CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTT AGCACCTGGA GCAT

SEQ ID NO:2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GTTAAAGGGT AAGATAATTT CCTGCAAAA GGACACAGAA GGCAGTCTTA AGAAGATGAA TGGATGAGAG
AAGGGAGAGA ATAAATGCA ATAACGAGCC AGCATTACT ATGTATTNN TCCTCACCTG TCTCTCCATA TTTAGGTGAC
TTACCAGTTT CTGTGCCCTT TTGGAGCTTT INTTGAGGCG TTCAATTCTCA CCTGTATTT CTTAGCCCT AAATTGACAC
TCTCTCAAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAGGGCT
AGTGTTG

SEQ ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TTTAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTCAG CCTACAGCTT TCCAAAGCAG
CAGTGAACA TGTGTGTGAG TTTATACCAT TCATTCATTC ATTTATTTT NCTTCTTTC TTTCAGAAA TACTGGGTGT
TTGATATTTG TTTCACTGTG CTAGTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGTG GATGAGAGCA ACTTGCTTTT
TACAATAATT ATTTGTTATT GTAAATTAAC AATTGCTCT TCTGGTATTA TATGGAAGTA TTTGATCQNG TTGATGCCAC
TGCCTTTG

SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGG AAGCTGTGTG CACGCGCGTG GAGGGTNCN TTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTGAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCT COGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCAGC TCAGGGCTCC TCCAAGGAAC CTGGGGGGCC CATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNC
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTTCTC GTGATAC

SEQ ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTTCT GCATTAACT AGAGTTAAAA AGGAATATTG TTTATTGTTT GGCTCTCCCC ACTAGAAGTT TCACAGNGC
ACAGATCATA TCTACCATT GAACAGCTCT CTGCCTGATG GCTAATACAT TTNTGGCAT ATAGTAGGTA GGTGCTCAAT

433

AAATTTNTTA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTINCIAT TAGGATTAA TAAAACAAAG TGATCTTTAG
AGAAACAAAT CTCCCCATCA ACATGCTATA CT

SEQ ID NO:2029: (Length of Sequence = 261 Nucleotides)

ATTTCTACTA AAANTACAAA AAATTAGCCA GCGTGGTGG TTGTGCACCT ATAATCCCA CTACTCGGGA GGCTGAAGCA
GGACAATTGC TTGAACCCAG GAGGTGGAGG CTGCAGTGGG CTGAGATCGC ACCATTGCAC TCCACCTTGG GCAACAAGAG
GGAAACTCCG TCTCAAAAA ACAAAACAAA ACAAAACAAA AACAAAAGTC AAGTGCTTAC ATTTTGCCAG AAGCCACAAA
TGAAGACTGT GCCTTATAGG C

SEQ ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCCNNGGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTGGCACAG GCGTTTCTGA CCGTCTGGGC
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCCCAGT AGGACAGGGT CACAAAGCCT GGGTTTGTCT CTGGGTACTT
TGCGCCTCTG GGGTGCTAGA GGTGGGGCAT GGTGGCTGGA AGTAAACTG CCAACTCTGG CCTCAGAAC TCTCAGGTAT
AGAAGCCCCA GATGTCTAAT ACCCINTCCC AGTGCCCGAG AGCTGCCCTG TGTGAGGTAG AGAGGACACT GTACCTGGGT
GAATGATCAG ACCCTGGTAG CTAAGAAGN ACTTGTCCCT TTAGTCAGTT TGCAGANCCC CTTT

SEQ ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCAGAGAGG AGAAGCCACT GTTGCCAGGA CAGACGCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT
GGACCAGGGA CAGACTCACT CTGTGGAGAC ACCATACGGC TCTNTCACTT TCACTGTCTA TGGCACCCCC AAACCCAAAC
GCCAGCGAT CCTTACCTAC CACGATGTGG GACTCAACTA TAAATCTTGC TTCCAGCCAC TGTTCAGTT CGAGGACATG
CAGGAAATCA TTCAGAACTT T

SEQ ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGACG GCGTCTGGTT CTTGCGGGA AAGCTCACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC
CCACCTCGAC CACGAGCAC CACAAGCCAG GTCACCCAG CAGAGGAAAA GGATGGACAC AGCCCCATGT CCAAGGCCCT
AGTCAATGGA CTCAGGCAG GACCAATGGC CTTGAGTTCC AAGGGCAGCT CTGGTGCCCC TGTATATGTG GNTCTGCGCT
ACATCCCGAA TCATTGCAGT GGCAAGACTG CTGACCTTGA CTTCTCCGT CGAGTGCGTG CATCCTACTA TGTGGTCAGT
GGGAATGACC CTGCCAATGG CGAG

SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAAGA AAGAAAGAAA GAAAGAAAGA AAGAAAATGG CCCCATAGTG CTTAAGTCCT CAGACATGTG TCCTGGTGCT
GGGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTTGC AGGTATCCA CCTTCGACTT CAACACATGT GACCAGAAAC
CTTCCCAAGG CAGCCATCCA CTTTGCTGTC CCTCCGACGG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC
ATCTGGCCTT GGCAGCCTAT GGATTINTGC CATCTCCTG GCATGAAATC ACTCCTTCTT GTTGTITTA TTTGCATTTC
TTCAGTACC AGCGCAGTTG AGCATCTTTT CATACACTTA CTGACCATTT CTA

SEQ ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAGA ACATCAGCT GTCTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTTGCAAG GCTAGCTAAT
TTTAAATCTG GTATGAGTAA TACAGTCAA CCTAGTTAGT ATGCGAGAAA GTCGTTGCTA ACGCATGGTG AGAGGATGTG
ACGTCACAGC ATGAGCAGTC CCTGGTTGTC CCATGTGTCAG ATAAACGTAG TNNAGTAGNT CCAAGTTTCT ATTCCAGGTC
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

434

SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG
 AGTTTTGATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAG ATGAGAGGGA AGCGTAGACC
 GCAGACCCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATT
 GCACANTGGG CTGATGGGCG CATTTCCTCA AATNGCCATC GGCACCAGCT

SEQ ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTTTATA TAAAAAGTGT TTCTGTGATT CTCAGAGCC CAGGAGTCAG TNCTGGTGGT TGGAGGGACC TGCCCCACT
 GGTTCATTTA ACCCTCTGTC TCGGTGCCCT NAGAACCTCA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCTCATA
 CTCCTGGTGA TCTATTCAIT CTNIGACCTC AGGGGTGACA TATAAGGTCA GTGTTTCTCG TCCCCGCGG ATCTGCACCTG
 C

SEQ ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTTT GCATTTTTTG TAGAAGGGT GGTCTACCA TGTCGCCAG GCCGGTCTCG AACTCCTGAG CTCAAGCGGT
 CCACCTGCCT CAGCCTCCCA AAGTGCTGCG ATTACAGGCT TGAGCCACTG CACCTGCCC AACCTTGACT ACTTCTAATA
 GGGATGAGTC GAGTAGCAGT TNGGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TCGGCCCGT CCATGGCTTG
 TTGTGCATCT GGCCCTGAGT GCCTTGGCCC

SEQ ID NO:2038: (Length of Sequence = 151 Nucleotides)

ATTTTAAATT GAGCATTAAAG GGAATGCAGC ATTTAAATCA GAACTCTGCC AATGCTTTTN TCTAGAGGCG TGTTGCCATT
 TTTTNTTAT ATGAAATINC TGTCCCAAGA AAGGCAGGAT TACATCTTTT TTTTTTTTTT TAGCAGTTTG G

SEQ ID NO:2039: (Length of Sequence = 166 Nucleotides)

TTGTCTGTG ACAACCTCCG TATGACGCC CGCCACCCG TGTTACGTC CCGTCGGCCT CCTGCACAGN CCACACGCTG
 CGCCCGGAAG GCCCTGCTG TGGAGAAGCC GGACCCATCC CCGAGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC
 CCTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGTACGGT TAAATTAGA TTTGACCATA TGAAGATCT TTTACCAGTT GGTCTCCAAG AATGTCTTCC TTATTATGTT
 ATTGGTCATT TTTGAGCGTG TGTGTTGGTG GGGTGGTTTC TGCCITATAT TCCTTAATA CATTGTATAT TTTTGTAAAG
 AATIGGGAAT TCATTTTAAT GCTTTTAAAC ATCTTCACTG GGAACGGAA TAAAGTTATT CTGACTCTG TACCTTGAGC
 CATTGTCAA GTGAGGGGTT ACATTTTAGG TATCTAAAAA TTACTCTTTA ACTTTCACAT TCCTGGGTT AGGAAGCTGC
 TGTTCAAGGAG AAATTTCCN GGTCTCTCTG GCAATGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGTNATGAAG TCGAGGAGGT GCGTGATAAT GGGCCAAGTG AGGATGCAAT GCACCAGGTG TATAAGTAGC
 TGCACTCACT CCAGCTCAA TTCCAGTTC CCAGGCAGAC CTCCTGGAG CTTGTGAGG ATGTNAGGAC ATAGTCTGAG
 GCACATGAAT ATGATGCCA TGACCATAGT TTGGGTGCAT CCTATGTGGA TGGGGTGGGG GCGTTTCATG TGCCCGNTT
 GGATGCTGCA TCATCTCTCT CCTTTGAACT TCATCTCTCT GCATCACITC ATGAGGATGC AGTCTCTGTN CTGGAGGTGC
 TGTGGCTGGA ATATGGTGCG AAATTGGCTG GTGTGTAGGA

SEQ ID NO:2042: (Length of Sequence = 403 Nucleotides)

435

GTTATGTGTG TTGAGATGG AGTTTCACTT TTNTTGCCCA GGCTGGAGTG CAGTAGCATG ATCTCAGCTC ACTGCAACCT
 CTGCTCCCG GGCCCAAGCG ATTCTCTCC CTCAGCCTCC TGAATAGCTG GGAATACAGG TGCCCAACAG CACACCGGC
 CAATGTGTGT ATTCTAGTA GAGATGGGGC TTCTTACGT TGGCCAGGCT GGTCTCGAAC TCCTGACCCC AGGCGATTCC
 CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCAGTCGGAA GTAATAGTTA TTAACCAATG
 TGATGGCCGG GTGTAGGGAC CCTCGCCTGT AATCCAGCA CTTTGGGAGG CCAAGGAGGG AGGACCGCCC GNGACCAAGA
 GTT

SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCGTACGG TGTGGCTCTC AGCAGCCTCA CCACAGGCAC CGCAGCTTTC CCGCTGTGCA CCCAGCTGGG TGTGTGAATC
 CCCCTGGACT GCGCCAGGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCCTCAAG GGCACTCAGA TCTACATGCT
 GACCTTCATC ACCGATGGCA TCGTAGGTT CCGAGTGTTC CACTTTTAC AAGGCGGCCA CCAGCGTCCT CACCACCAGC
 ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTCTTT GCCTGGGCAA NTCTCTCTC CTCAAGTACA CCGAGAAGCT
 TCAGGAGCCC C

SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTACCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC
 TGAGACAGTC AGCACTTAAA GGGTGAGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCC
 AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA
 AGAG

SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCCATTCT GCTCTGGCC TCTCTGAGG CTCATAATG GGAGACCAA TCAAAAATGT CCCATGTAC
 TTGAGTGGGT ACACTGCCTA CAGAACCTTG AGGTTGACTC CTGCTTCAGT TCTCAGCTGT TTACCACAGC CCTCCAGGT
 CCAAAGATTG AGGAGCTTTC TCTTCTCTGG GAGGAAGTGT CTCANATTTA GCTTGTGTGT GTTTTGGACA GAGGCTCCAC
 AGCGGTGGCT CTTGAGGAAT CCTCACCAGT TTGINCTCTT CCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT
 CATTAAACCA GGG

SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGTTTAT GTTTTATTT ATGTATTNA ACTGACTTAT TTGTGTATCC CACTAGAACA ATACATTAC AATATACITG
 CAGAACTGTG CCTGGNGCAT CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTGAAG AAAGGAGTAA AATCTCCCC
 AAACCTTAAA GGCACTCTTT TCGTAGTGTG GTTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA
 AGAAGCAGAG TCAGGGAGGC AGACAGCAGG GTTT

SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GGCCGCGATG TGCTTTTNTC CTGNTTCGC TGCCCGGGAT GCGGAATCTT GAGCCTCGGT GTCGGGTAC AGAGTTGTCC
 TGGTGACGGG ATGCGGAGGT TTCTCTCTT TTGTTGTGGG GGCGGCTGGT GGCAGGGGCA GCTGTTGGCA GGGTTGCCA
 CGCTAATCTC CGAGTCTCTA AGGGCACCGT CTTCTCTGGA TCCCTCTTGC GCCTCTGTTA TAAAGGCAGA CCCGCGGGCG
 CGCGCCGGCA ACCTGAAATC AGAGCAGGCG TCCGTGGCGC TCAGGAACCT TGCTGAGCTT CGCCGATCTT TCATTGTGTC
 TTCAATT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

436

ACTTTGTTGT TCTGATTTTA GGA CTCTGGC TGGCCATGTG CTNNNGGTTG CCTCTCCTGC ATTINCCACT GGATTINCAC
TGCATCGTTT GGAGATACAA AGCGAGCAGT TCTTGGTCAG AACCTCTCTC TGCTTTTCAT TGTGTTTGAT AATGGTTACT
GGGTCTTCT CTCAAGGTA GCAAGGCCAA GCTGATGGCT GCTTGTITAG GAGGCCATCA GTTCTTCTCT GTGGAGAAGS
G

SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTTTITAGTA GAGACAGGCT TTCACCATGT TGGCCAGGCT GGTCTCAAAC TCCTGGCCTC AAGTGAGCCA CCTGCTTTGG
CCTCCCAAAG TGTGAGATT ACAGGTGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGTTAAG ATGTCAGTNC
TTTCTAAAGN GATTTTITAG ATGCAACACA ATTCCAATCA AAATCCCAGG NTTTTTTTGT AGCTATCAAT TGATAGATAT
CAACAGCCAG CTGATTCTCA AATTACGT

SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAGCT AAATGGGGAG AATTGAAGTT TGCATTTGAC ATGGTATTAA ACAAACCAA
AGGGCTGAAA CTCATGTTTA GACAACACAG GTCAGTAGTC ACTAGGCAA GAAACAGTC CACAGCAGGT GGCACAAATA
ATTCCTATAC

SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACTCG CAACATTCCT CCCACATCCA CATCCAGAC
GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA
TGCACAGGGA GAGAATTINT CCCCGGATAC CCTGAGGAC CAAGGACCAC CCCAGGCTA GGGTGGGAGG ATTGAGAGCA
GTGCAAGAAA CCAAGGAGGA TN

SEQ ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGTCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG
ACCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGACTGA GGAGGTGATC TTAGTGAAT TATTTTATAC
TCACCTCCCC CGGGGTTTAT TCCTTCTTCC AAACACTTAG TTCCAGGGCG CAGGAGACCT GTTACTAGCA CTGTATGTTT
CTTTG

SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TTTCAAAAT AGTCITAAGA GTATAAGCTG TTTTINAGG CTGTAGCCAG ACTACATAAT GAGCGGTGAA AGCGGGCTGCC
TTCCCTCTC CTGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA
GANGCCAACG GCAAAGNCC CCGCGCGCTT GCTCGTGTT AATCCAGGT AAGCTATACA CG

SEQ ID NO:2054: (Length of Sequence = 341 Nucleotides)

GTAAATTAAG AATATGGCCC CAGAGTTTTG TTTATCTGGG GTCTGAGCAT AGATTTTATA TTCTCTGTTG CGTTTTTAA
ATCTAACTTT CTGTCTCCAA TGAGAGAGA ACAGGGAGGA TACAGAAGTA TTGCAGCCCA GATCCCTAT CAGGGGGACA
GCTGGTGGC AAAGCAGCCA CCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT
ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCTCT AGGGGTCCA CAGGCCCTG ACCGCACAGG
GAGGCTGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

437

CTGCCCTCAGC CTCCCAAGTA GCTGGCATTG CAGGCGCCCA CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGAGC
 AGGTTTCACT ATGTTGGCCA GGCTGGTCTT GAATTTCTGA CCTGTGATC CGCCTGCCTC GGCCTCCCAA AGTGTGGGG
 ATTACAGGCG TGAGCACCAC GCCCGGCCAA CTGTCTTTTC TCTAATGGCT GCGATGTA ATTTTTTCAC TGGCTTATTT
 ACCGTCTCCT TCTGTGGA

SEQ ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT
 CCTCTTTTTT TCGAACTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC
 AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACTTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC
 TTCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCCGA CGCAGGAAAC TG

SEQ ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAAAGT TGGGTGCCCTG AAGGTGGGGT TTTGATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC
 TTATATGCTT GGTGCTCAGC ACAGGTCAAG ACACACAATA GACCCCAAT AAATATTGTC TGAATTTGAA CAATTCCTGT
 AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCCTTCTCC CAGAAGCTCC TGGAAATGAGC
 AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAAT CGGAGAATGG CAC

SEQ ID NO:2058: (Length of Sequence = 172 Nucleotides)

CITCTACAGT CAAGGAGCTC AAGCTCGCCG GCGACCCCTG CTCTGCCTC CCACATTAAT GCGGCATCC TCGGAGGATG
 ATATAGACCG GCGGCCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCCG TACCTGCAG AGGCCAGGTT CTCTTTAAC
 CTGGGGGCG CT

SEQ ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAGT AGAAGGGGCC
 CAGAACCAGG GCAAGANGGC TNAGGGGGCC CAGAACCAGG GCAAGANGGC CGAGGGGTCT CAGAACCAGG GCAAAAAGGC
 CGNGGGAGCC CAGAACCAGG GCCAAAAGG AGAGGGAGCC CAGANTCAGG GTAAAANGAC AGAAGGGGCT CAGGGCAAAA
 AGGCA

SEQ ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGTT AAGGAGCTTG GGCTTGATCC TCTAGGCAGG GAGCGTTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG
 TCACACTCGC CATTATGTA GATCGTTTG GCAGCCAGGG GAAGGATGGA TTINAGGGGG ATGAGATTAG AAAGCTGGGA
 TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAATNATC GTTGGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG
 GACTTATAGC AGAGCTGTT GAGTCTTGCT TTGTCACACA GTTCAAATAA TCACTTAGTC ATGTGGTTTA TCTTGCCA

SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGGATCAT AAGCAACTCC TGTTCTGTG GGTTTACCA CATTCTCCAG AAAGTGAAT
 TTGCTCATA AAAATTACAT AGAATGTAAT CTAATTCATT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG
 AGCATCAACA CTGACAGAAT ATTAATCTG AAGCCATTA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG
 TGTGACTATC CCAGTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAATA ATAATCTCAA GGTTAGNAAA CTAAGACATA
 ATTTCTAGCT C

SEQ ID NO:2062: (Length of Sequence = 316 Nucleotides)

438

CTAAAATCAA CCACATAATT GGACATAAAA GAATCTTCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG
 GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT
 ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AACTAATGA GAAGAAAGAT
 ACAACGTATC AGAAACTCTG GGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAAATGCTC ACATTG

SEQ ID NO:2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTG GAACTCTCT AGCAACTTGT NTCATCCAG TGATACTGGT TCTNTGGGGG
 GCACCTACAG GCAGAASTCC ATGCCCCAAG TGTGGAGTG AGCGTAGAT CCCAGCCTC CACTGACAGG CAGAACACCC
 AGTCAGATAT TGGTGGCAGC GGAAAATCCA CGCTAGCTG CAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC
 AGTTATAGAG GACCTCAGGA TTCAATTCT TTGTCTCTG AGCAGCATGA ATATACAGAG CCAACATGCC AT

SEQ ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAGA ATCCTCAGAT GGGAGACCA GCCAGTTTG NTCACAAATT AGCAGAAGTC AGCCAAAATA TAGAGAAAT
 GCGAGTAGAG ACCCAGAAAT TTGAGGCCTG GCTGGCTGAG GTTGAAGGCC GGCTCCCAGC ACGCAGCGAG CAGGCGCGCC
 GGCAGAGCGG ACTGTACGAC AGCCAGAAC CCCCCAGT CAACAACINC GNCCAGGACC GTGAGAGCCC AGATGGCAGT
 TACACAGAGG AGCAGAGTCA GGAGAGTNA ATGAAGGTGC TGGCCACGGA TTTT

SEQ ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGTT TCACCGTGT GCGCAGGCTG GTCTCGAACT CCCGGTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC
 ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AAACCTTTGG AGAGAAGCAA GTCTTCTAGC TGAACGTGAT
 AATGGCCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC
 ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA
 GCAGCATTTG G

SEQ ID NO:2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CTTGACCTCA GGTGATCCAC CANCCTCGGC CTCCTCAAAGT GCTGGGATTA CAGGCGTGAG CAACCGCACC
 TGGCCTTGAA CCTTTGAAG TATTGATGCA AAAACAAGTG GTCAGCTATG GCCAAATTCG CAATTCAAAA AGATCCAAGA
 AAGCAAGTTG AACATCCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA
 GCCAGTNTAA GCAGGTTTAA CCCCAGCCCA TGATTTAGAG AGATGTTNAG TGCAATCCT GAGCTCAGCA GAGAGCAACA
 T

SEQ ID NO:2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCCGAGGT TGGCTCACTG CAACCTCCAC CTCCTGATCT CAAGNCGTCC
 TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGAA CTACAGGTGG ACAACATCAC ACCCAGCTAA TTTTNTINAT
 TTTTGTAGA GACGGGGTTT CACCTGTTG CCCAGGCTGG TCTCAAATC CTGAGCTCAA GCAATCTGCC CACCTAAGCC
 TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCTGCTT GGCCTGGGAA GTCTTTTAA CAGAGGTGAT GTAAAGTAGA
 AAAAGCAGTG GGCTC

SEQ ID NO:2068: (Length of Sequence = 274 Nucleotides)

GCAACCGAAT GGACAGGGTA AAGAAGGAAT GGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCCAAGC AGAGAGGCAG
 ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC

CCACCTGGCC CGAGTGAAG CTATGCTGAA TGACCGCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG
ACCCGCCACG GGCTNATCGN ATTCTNCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GTGCCATCTG TTTACTTCTC AAATGAAAA GAATTCAGGT CTGAGTGTCC AGGAAAGGGG GTGAATTTC TAACCGCCTG
TGACAGCGAT GGAAGGAGC CACACCCCTC CAGAGGGTAC CACCCAGCGG ACAAGTGGGG AGGAGGAAGT AGCTGGCATG
AAGCGGCCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCTTT AAATAGTATT TCATAAAATA
AAAATGCCCA GCACTCTTAG GAACCTCTCA TTCAACCGCC TAGTTTTTGT TTAAATAATT CTAATGCCAG AGCTGGGGGG
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCTGCAT AAAACAAGTT TAATTTCCAA CCAGGGTCAC AGTCATCGG TTATCCACA TTTTGGAGCA GGATAGAGAA
GGTGAGTTAT TAAACATATA CAGTCTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAACTTTGG
G

SEQ ID NO:2071: (Length of Sequence = 288 Nucleotides)

GTGGAAGGGC CTTCATACAT GCTTCCCATC TTCAGGAACA TCAGAGAATT CATACTGGGG AGAAACCATT CAAATGTGAT
ACATGTGGTA AGAACTTCCG TCGTAGATCA GCACTTAATA ATCATTCGAT GGTCCACACA GGAGAGAAAC CATACAAATG
TGAGGNCITGT GGTAAAGTGT TCACTTGTAG CTCAAACCTT CGTATCCATC AAAGGGTCCA CACAGGAGAG AAACCTTACA
AGTGTGAAGA ATGTGGTAAAG TGCTTTATTC AGCCTTCACA ATTTTCAGG

SEQ ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCTTGCTCTC AGACCCCTTT GCGTATGTG CCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG
CAGTGAGGAG ACTTAAGCCA GGGTTCCINC AAGNGATINC ACCGACCNTT CCTGCATCTC TGNATGCCGG ACTCCTAAGC
ATTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

GGAGCGATAC GCCCCTGTG CGAAGGACCT GCGCTCTAGA GATGTGGTGT CTCGGTCCAT GACTCTGGAG ATCCGAGAAG
GAAGAGGCTG TGGCCCTGAG AAAGATCAGG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGCGCCTG
CCTGGCATTT NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCACGAA GGAGCCGATC CCTGTCTCTC CCACCGTGCA
TTATAACATG GGCGGCATTC CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCTTGG CTAATTTTIG TATTTTLAGT AGAGACGGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT
CTCCTGACCT CAGCTGATCT GCCACCTCG GCTCCCAA GTGCTGCGAT TATAGACAGG AGCCACCGNC CCCGACCTC
TCTCACTTCT CAAATCTCTT TCCTTTTTC ACCTTCTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGTT CAAAACCAAG
CTGACCGGGT AAGTATTTAC AGCAAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GTCTCTAGGA TTCACTCAA CCCAGGATCA CGGTTTGTG ATGTATCAA GGCAATGATT TGGATTTTCA AGCTGGCCCA
GTGAACAACA AGCAATCAAG CATTCCTTTC TCTTCTTTC TCTCTCTCAC ATATACACAC AACTCTTTC TCTCTCACGT

TACTTTCACT GTCACCTTCT CTCTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACCTTCTT CC

SEQ ID NO:2076: (Length of Sequence = 223 Nucleotides)

GTACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCINACTTCT
TCCTGGTTTA GTCTGGGTG GGTGTATGTG TCCAGAAATG TATTGATTTC TTCTAGATTT CTAGTTTATT TGNGTAGAGG
TGTTTATTTCT CTGATGGTAG TTTGTATTTT TATGGGATCA ACGGTGATAT GCTCTTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCCCTGTGTG AGACCAGGCT CTGTCTCAGG AACAGGCCTG AGGGAGGAGG AGCCACGTTT CTCCTTCTCT
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAGCATG ACATCCAGGT GCCAGCTGTC TAAGAATATGG AGCCTGAGGC
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTCAGAG GAAAGAAGGG TGCTCCAAAC GCCAGGCCCC CAAGGAGCAC
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTTGCAGT TGTAAATCA AACCTACTGA CATTTATAGT CCCTTACTTT CTCTTCTTTC TTCCATTGTA AATGTCTGAA
ATGTCGTACA GTCATACTTC CCACTGTATT TTTAGGTTTT ACTCTCATAC TTCAATAATC ACTACCACCC TTTATTTCAA
TAAAGTTTT AAGTCAGTGC TGATTTTTTG GTAGCTCCCA TTTTCTGATA TATTTGTCAT GTACATATGC AAGTGTATGT
AATGTAGGTG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGTC CATATACAGC

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCTGCC AGAAGATTAA AAAAAAGAAT GAGAGAAAAG CCCAGTATGT GGTGTGCAAA CTTACTTCCT TTAAATGTCC
CATGGATGTA GGACAGTGCC ATGTTTCAAG ATGCCTGTGA GCTAGTCTT CAAGATTTAT AGAATGTTAC TTATGAACAA
AATATAATTA TTTATGGTAC AATCTTTGTA CTTTAGCAAA TCTGGAGTTA GTTCATAGTC AAAGTCAGTT AATATTTCTT
AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCTNCTT TATTAATACT CACATGTAAC CTTTGCTTTT TACACAAAAG TCTGCTTTAG
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTCCTGGA CCACTTCCCC TTTCTCCACC CCCACCCCA
CATCCAAAT ACTCTTAACA TGTTACAGA TACCACGNAT ATTTTGTAAG CAAGNTTGG GTTACTGGAA CTGATTTCA
TTAACATCCC ACTTCAAAAT GGAAGGCAGG TGGAGGGCAG GGTAAAGNAA TAGGGGGAAG GAGGGCAAGA G

SEQ ID NO:2081: (Length of Sequence = 207 Nucleotides)

GGACGCACGC TCGTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACTT TTTACTTAGC CTTTTTGGTT TGINTCCCCA
CCCCACCTC CTCACCCCTT TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCACG GGCOCCTGCA GCCCCTGCCT
CCAGCCTCCA GCCTCACCTT TGTGCCAGA CTCGCATTG GAAGACT

SEQ ID NO:2082: (Length of Sequence = 260 Nucleotides)

TTAAAGAAA GTGCATACTT ATTGCAAGG AAAACAAATG GAATAGACAA AAATTTTAGA ATATAAGAC TTTTTNCA
TTATGTATGT GTTTACAAT CAAAATAATA AAGCTAGTTA AAAGTCAATA CATATTAGAT ATATTCAAAT ATTTTNC
ATAAATTCG ATCTTATCAG TTAACACCA TAGCAAAAGA CTAAGGAGTA TTTGTATAAC ATTAGGGTAT TTGACCTCAT
ATTCTATTCA TTTGGGTTTA

SEQ ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
GGGTCATTTC GGATCAGAGA TTCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTINAGGA
ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGGAAAACAC ATTTACAAGA AGCTGAACAA
CTGTATCAG AACATACATC AAGGTGAAGA GTTTCGGCCC TCTTGGTATA GGGTATGTAT GTGTACATCT CCAATTTTGA
ACAATGATGA CATAAGGCT AATACTCTAT TTATTCAGGN GACCCCATAA TCAGGATAAT AGTAGGCATT CAGAGTAATA
AAGTGATCAC AGTTG

SEQ ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACIT TTTACTTAGC CTTTTTGGTT TGTGTCCCA
CCCCACCTC CTCACCCCTC TTCCAGTTCT TCTTCAGGCC CCTCCAGAC GCACCCAGC GGCCCTGCA GCCCTGCCT
CCAGCCTCA GCCTCACCTT TGTGCCAGA CTCGCATTG GAAGACTCA CCTCCCGCC AGGCCTGGC TGTGGGCGG
TTGGAGATT AGGTTTTAAT CCACACAAGC CCCAGTGAGG GGTGAAGCAT

SEQ ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGTTTCATAT GTTTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GCGTGCTCAT
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
GGGTCATTTC GGATCAGAGA TTCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTIGAGGA
ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCGCAA TATCAATTTT CCCAACTCAG CCAAGATTTT
CCCAGCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGAAAACACA TTTACAAGAA GCTGAACAAC
TTGTATCAGA ACATACATCA AGGTGAAGAG TTTCCGCCCT CTGTGTATAG GGTATGTATG TGTACATCTC CAATTTTGAA
CAATGATGAC ATAAGENCIA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTC AGAGTAATAA
AGTGATCACA GTTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT ACACTT

SEQ ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATTGAATAAC TTAGGCAATC TTCCACTTTG ACTGAAATGA TTAAGATCAG TTTACCGAAA GTCATTTCAT CCTTGCCCTG
CAGGCATCTG GCTATTCTTG GTGCAGGGCT GATGGGAGCA GGCAATGCCC AAGTCTCCGT GGATAAGGGG CTAAAGACTA
TACTTAAAGA TGCCACCTC ACTGCGCTAG ACCGAGGACA GCAACAAGTG TTCAAAGGGT AAGCCTGCTC TCTCTCTTG
CAAGAGTAG AATGTCTTT GTTCTTGGT TAGTTGTTTT TTGTGGTGGC TTGGTGGGT TTTTGTGTTG TTGTCTCTG
CCATCA

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT
CGGGTCTGCT GATCATGGGA GCGGGCGGAG GCTCCCTCAT CGTCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

442

GGGGCTATCA GCCATGGCGT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCGCGGAAC TNCAGCGGCA
CGGCTATGAG AACCCCACTT ACGCTTCCT GGAGGAACGA CCCTGACCCG G

SEQ ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACACGC CCTGGTACAT GGCTGAACTC TTCCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG
GAACCCCTCTT CATCCGCTGC AACATCGCCT GTGTCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GTGCTGGAG
GTCAATTGTGG TGA CTGCCAT CACTGCCATC ATGCTTACC CCAATCCCTA CACACGCCAG AGCACCAGCG AGCTCATTTT
TGAGCTGTTT AATGACTGTG GAGCCCTTGA GTCTTCCAG CTCTGTGACT ACA

SEQ ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTTGGAAT GGTCAAACAA TTTAAGTCAA ATGTTTTAAT GGTGCAATTA AAATAAGGGT TCAAACATGT TTTCAATATA
TTAATTINCTT TAAAGTCATG TTCAGGCAAG GTGCTGTTA AAAAACCCTT ATTAGCTTTG TCCACACATG TAAGTTATCA
AAAGTTACCA AGGTAATTTT GACGTTGAAT GCAGCTTTAA ACAATAAAAA AATGGTATTA GGTTTACTTC TCGAAGCAAA
GAGAGCCCCC AACCTTGTA ACTAAACATT CTGA

SEQ ID NO:2092: (Length of Sequence = 290 Nucleotides)

GGTACGTAGG ACGCTGGCCC TGTCCTCCGG CCGGNTCTGG TCAGACACAA TCATGGTCTC CACCACGAGG TGTGCAATGC
CTGGNAGGGT GGTGTGCTCC AGGTCCAGGA GGGCAGATCC ATGGGCGATG GTCTCTCTGA GCTCCAGAAG GCTACGGAAG
GAGAGCGAGG CAACATGGGG CTTCCTCCAG CGCTCCGTCT CCTCTCCAC GTCTCTCTCA AACTTGATCC AGCGGGCGGT
CTCCCGCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEQ ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTG ATACAAGTGG ACCTAAGAA ACGAGTTCCG CTACTCCGGG ACGAGACTCC AAAACCATCC AAAAGGGATC
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGCACAGAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC
CCAAAAAGGC TGAGAAGSCA GCTGCTGAAG AGCCTCGTGG AGGCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC
CCC

SEQ ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGTTT TGTTCCCTG CCTCAAGGCC GGCCATGTGG GAGTGTATC TGTGGAGTTC ATTGCCCCAG CCTTGGAGGG
AACGTATACT TCCATTGGC GTCTTTCTCA CAAAGGCCAG CAATTTGGGC CTCGGGTCTG GTGCAGTATC ATAGTAGATC
CTTTCCCTC CGAAGAGAGC CCTGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAACAAG AAAGAACTN CTGAAGTCGG GGGCTGCTAG
AGGATTTTCA GGAAGGGTCA ACACAGSCCT CACTTCCAGT CCTCATTTT CCAGCTACA GAGTCACCAG AGGGTGAGAA
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CCTTNTCTC AATTACAAAG GGGTGATTT CAGAGGAGGG
AATAGGGATG GAGAGGAGGA GAAGACCTGC CCAGGAGCCA GATAAATTCA AAGTCACCAA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)

443

CTAGATATAA CTACCCITCT CTATTCTCA CCTAAATCCT TATACTGCTG ATGACTTTGG AAAATAGTAC AGGGTTTTAC
 AGTCTAATCA TGACAATACA TCTCCAGNT CCTTGAGCCA AATACATTCC TCAGAATACT TTTTTTAAAA AACTGAAATT
 GATTACTTGT ACTTTGTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACTTCTAC CATCCTCACT
 ATTGTAACTC ACAGTAGACT ATGCCTCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCAITC TTCCACCTTA
 AACATAT

SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCCCTGCTG AGGTCAATTT CGTCACTGAT GCCTCGGGTC ACATAGGCCC TGATGACCCA GATTTACAC AGAGGTCACT
 ACATCGGTCA ACTTTCTCTC CAGGAGGGGC CGGGCTGGT GGGCCATGCC CACTCCGTGC CACATGCCIA GCATTCAGAG
 CTTTGTAAAG AAGCCCTGTT CTAAATGCTC AGGTCCCACC CTTCCTTGTC AAGAGAAGCC ATGGGCTTCC TGCTCCTGTG
 TCACAGTGTG CCACTGAAG GGTCCTCTT CCCCATTCTT CTTCATGGG GGCCAG

SEQ ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGTTTIN TTGAGTGTIT TCTCTTTTT NTITGTTTT AACATACTTA CTGGTATAA AGTCATGCAA AGAAAACAGT
 GCAGACAGTA GATCTAGTG GATGTGCCAA GGTATTCCAC TCAGAGTCAA TCCCAGGGAA AGAGGGAAAG AGGAAAAGAA
 AGAGAGAATG CGAACCCGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAAT TCCAGTGTCT TTGCTGTGGT CATCAGACGC
 CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGCCC CCCAGAGTGT GGTGGGGGGT GCTGGGGGGC GGCACACAGA
 TATG

SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGTCA GTAAGGAGCT CTTTATCTTT ACCTTCCCAC TCCAAACCTA CTGCTAGCT GTTCTTATCA TTGCTCTCTT
 TTCTCTGTC ACAAAAATGT GTTCATCTT AATGAACACA TTTCTTAAAT GTCTTCTTA ATGAAGGACA GTCCCTTCTC
 CTGTGCTGTG AATCCCATAG TAATGACATT AGCTTAAGTT TTCTGAGCAC TTGCTATCTG CCAGTCTCTC CCATGAATTA
 TCTTGCTTAA GCTTTCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTTAT TTGGATTGG TTCACAATGT GGATCAAACA GGAAAATCTG TTATCATCAA CAAGACCAGC AGCACCAGAA
 TTNINCOGAGT CTCCAGCAG TGCAGGCTCC TCAGGNTCCG TGTCCCGCAC CCATCCACCT CTCCAGAGCA CACCCCTAGT
 CTCAGGTGTG GCAGCTGGCT CTCCAGGCTG TGTGCTTAT CCAGAGAATG GAATAGGGGG CCAGGTGTCT CCCAGCAGCA
 CCAGCTACAT CCTCTTCCA CTGAAGCTG CAACAGGCAT CCGCCTGGG AAGCAATCCT TCTTAAAT

SEQ ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT
 TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTTCAAA GGCAATCACC C

SEQ ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTCTTAC ATGINTTGGT AGATAAATGT
 CATAGACTGA TCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
 TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

444

TGGTGCCAC GCATAGACTT CCACAGAACT CTTCAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT
AAT

SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CCTTTCACTC CCCCGCCCTG GGCCTCTGCT CTCTTGCTG GNTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NTGACTNGGC
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

SEQ ID NO:2104: (Length of Sequence = 367 Nucleotides)

CCTTTCACTC CCCCGCCCTG GGCCTCTGCT CTCTTGCTG GCTTCCTTCT TTTTGTAGGG AAAGAGGGTG GGGCTGCAGG
CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA
ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT GTGACTGGGC
CAGGGCACAC GTTGGTCTCG GCAGTGGCTG TAAGGTACCC TTCCTTNTCT TGGATGCTGS TTTCAACCAT CTATATATGG
CATCCACGCA TGGGATCTGC AAGCTGGAGC CCTCTACCC GCAGCTT

SEQ ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCTGCNC TTGNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT
TGCTCANAT CAGCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG
GNATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

SEQ ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAACTACT ACTTTGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT
CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCTGCNC TTGNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT
TGCTCAGAT CAGCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTCTCCC TTGTACTTTT TTTTGACCTG
GCATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT
GATGCAGAGC CTGCACTCTG GCACTCGCT

SEQ ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GNTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA
CCCTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TTTTCATGGG CCGCCTGCG CTGTCCCTCC
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAATT NGGGAGCTAG AGAGAGCCCA
AGTGAACCTT GACTGTCCAC GCAAGTCCCA TGCTCTCTC GTCTGGAGT TCCTCGAGGT TCAGCGAGCC CATCCGCTT
AGGGCTCT

SEQ ID NO:2108: (Length of Sequence = 261 Nucleotides)

TTTTCATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCTGG TTAGAAGACC
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGAGG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA
CCTCTAACTC TCTCTGCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCCTGTGTTA
GCTGTGAGGG ACAAGGCAGA G

445

SEQ ID NO:2109: (Length of Sequence = 329 Nucleotides)

TTTTTCATGCC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCTTCCTGG TTAGAAGACC
 TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTTAG GTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA
 CCTCTAATC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTACATGC CCTGTGTGA
 GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCATA ATGTTTGGGG GATGCTATGA CTCAACTTTC
 ATCTATTTT

SEQ ID NO:2110: (Length of Sequence = 271 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTCC CCCAGGGCCA CCTGCCCCTG
 AGGTCCTTGT GTGGCCGCCC TGGCTTGGCA GCCCTGCCCA CGCTGCCCC GCAAACAATG GTGTGTGGGT TTTTACAGCC
 CTTTTAGGA ACCCAATATG GGCATAAATG TAACACCTGT AGCGGGGGCA GATTCTCTGT ATGTCAGTT AACAAATAT
 TTGTAATGTA TTTTTTTAGA AATCTTAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GGCTTGAGCA GACAGAACGG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCAGTTC NCCCAGGGCC ACCCTGCCCT
 GAGGTCCTTG TGTGGCCGCC CTGGCTTGGC AGCCCTGCCC ACGCTGCCCC CGCAAACAAT GGTGTGTGG TTTTACAGC
 CCTTTTTAGG AACCAATAT GGCATAAAT GTAACACCTG TAGCGGGGGC AGATTCTCTG TATGTCAGT TAACAAATTA
 TTGTAATGT ATTTTTTTAG AATCTTAAAA ATTGCCTTTC CACTGAAGTA TTTTCATAGC TGTATTATC TCTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG
 GACACTCCTT TACCTCCCAT ATCCAATGTA TGINTTTCAC AGAAAAACAA CAAATTAAC AAATTCACAA AATACAACAG
 CTAGAATTAC AAAATCCATT CATCCAAGGG TGGTAGAAGG CAGGATGGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA
 AACAAAGTGT TCCAATCAGT CCAGGCACAG GGAAT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAATTT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGTGGGGT AAGAGACAAC
 TCCAGTGCAAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCTT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA
 CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEQ ID NO:2114: (Length of Sequence = 339 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAATTT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGTGGGGT AAGAGACAAC
 TCCAGTGCAAG TGCCAGGTGG GCAGGCTCCC ACTGTTCCTT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGGACACA
 CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA
 AGGCCAGTTC GTNGGCAGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG
 GATGAGGTGG CCCCTCATG

SEQ ID NO:2115: (Length of Sequence = 262 Nucleotides)

TGGAACACAA AATCCCTGT NTAACATTG TACATCGGG GCCTAGCTGC CCTTGAGGAT GTCTAGTTA CACCTCTCT
 GATACCTGTG GAGTTAAGC ACCATTCTTA CGCTGTGTC CCTTNGGAGG GGTGTCAGTG GAAGCTCTTA AAGGGGAATG
 CTGTCTCTGC CTCTGTGGCT TTTTGTGGG GAAAGGGAGT TNGGATNGA GGATTTAGAT TINAGGTCAT GATGTCAGAG
 CACACCAGGA ACTCCAAGG CT

SEQ ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTGCT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG
AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAGGAC GGT

SEQ ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCTNCA AGGNTGATC CACCTTNCC CATCTNTGG AGCTCAGAGA TTCTTGGGAG CTGAAGGTCT
TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTGCTGC TCTGATCTN CCGCTGGCCA ATGTAAAACC
AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCACCAC GCGCTGTAC T

SEQ ID NO:2118: (Length of Sequence = 309 Nucleotides)

CGGGAAGAA CAAATTGGAA TGGTGGGGGA TATGGGTGTG TGGTGGGGC GGGGCAGGAG GTCTCCGGG GTCCAGCATG
GGTCGGGAGT GGGAGCAGGA CAGAAGGTGG CCACGTACA GCGACTGAT GCTCAGCTCA AGGGGAGTGT GAAGAGGTG
GCAAAGAGCT GGGAGCCGG GCAGAGGAC AACACTGACT NAGGACATTN CAGTTGGGAA TCAGAAAAA AGGGGCAGCT
CAGGGGCATC TGATCTGCT CATTTTGAA AAAGAAACAG AGTAATGTAC AAAATTCTGG ATATCTTCT

SEQ ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGTAATCGTT GAAGATTACC AAAGTTTAT TTGGAATGAC ACAGCACTGA AAACATAATT GTTACAGATG ATTGTGGAT
ACAGCATACA CCATCTATTT TACTTTAGAA CAATCTGTGA AGATGAGTTG CATAAATAGA AAGAGGTGGA AATATAGAGG
AGCTGTTTTT ATAGTGTCT TTTGGGGTGA GATGAATATG CCCATCTTT CTACCCAATC TCATAAAGGC AGAAGAGAAG
ACTGCTTAGC TGCCCATCCC AACTAGCCTA CCTCCAGCCA CAGCGGCTGG ACAGCTAGAT AAATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CCGCTCTCCT GACGGGAGCC CACTAGGGGG TCCTCTTTCA TCTTTGGTGT GGCCTTACCT CCCACCAAAG AGATCCGAGG
CTTACTCTTC TCTCTCTGGG ACCAGCATGA CCCAGGATC CTTCAGGAG AGCTCTGTGA AGGAGCTGAG GCGGCTGGAG
GACCAGCTGG CCGGCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCT

SEQ ID NO:2121: (Length of Sequence = 224 Nucleotides)

GCGGTCAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACIN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC
CTNATGTCCT AGACACATGG TTTTNTCTG CCTGTGCC CTFTNTGCC CTGGGCTGGC CCAAGAGAC CCCAGACCTT
GCTCGTTTCT ACCCCCTGIN ANTTTGGAA ACGGCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCA GAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGA GAATCCCTA
AGCTCCAGGG CCCAGGTCT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGCTGG GGAAGAGGA
GCCTGCCCCC AGCAGAAACA GCAGTCTCA GCGGTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCCTCT GTTCTCTGA TGTGTAGGA AATTTGAAGA ATGACTCTGA TAAAACTA AAAGAGAAAC ATCGAATCCT
AACTGGCTGT GTGACCTAA AACCTTACTC CGTCTCTTG AACCTCAGAT TTCTCAGGEC TTGGCATA GCAAGCATTT
CATACTCAGA AGCTGGTACT ATTACTGTTG TGTTTGTGG GGGAGGTTT GTTTGTTTG TTTGGAGACA GGATCTGGCT

447

TTGTTGCCCT GGCTGGAGTG AAGTGGGGCC ATCATAGCTC ACTGCAGCCT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC
CTCAGTCTCC CGAGTAGCTG GGACCACCTG CCGATGCCG

SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCCGT GCATCTCTTG TCTGTTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCAAGAGGGC
TGCTGACGGC ATGGGTCGTG CTTGAGGGTG GCAATACCTC TTAGGAACTT AGGGCAGGAA GCAATACTTC AGCATTGAAT
GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TTGGTCAGGT TCAGGGGGGC TGAGGGGGTG CTCCTCCCTT CCCCCAGGC ACTGACACAT TGAAAGGAAG
CAGAGCAACA ATGACACAGC ACGGATGTGG GAAAGGGGAT CCCCCACGCG GGCAGGATGG TCCATCTCAC CGGGTCTCA
CCAGGACTCC CCGCTCCAC CCAGGGCCAG CAGGAGCACC TCCCGTTTC TCCCAGTGC AGAGCGTGGG GTGACAGGAG
T

SEQ ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTACTTCATA AGGAGTTGTA TCTTCCCACC TGCATTTCAT TACTGCCGGT TAGGACCTAA
GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTACCCCTT GCTGTGCATG
TATCAATCCT TATCCAGAA GGTACTATTT AGACTGTATA GACTGATTGA GATTACATAC TTTAGAGGAT TAAGGAAACC
ATAGAGTTTG GGCCTTGGAA CTGTTACTGC CTTGT

SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT
GATTATTACA CCAAATTCTG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTTG CATCGAATAC
CTACACGCCC ATTTGAGGAA GGAAAGAAAA TTINTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAAGAT
GGGTTTACAG AGGTCCAGCT GTCTCAGTT AATCCCCCGT CTTTGTACAC ACCAGG

SEQ ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTITGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC
AATTCCATT TTATCAGAT AGCAGAACAA CTACACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATTG AGCGTCACCA TCACAAGGGA
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTGAG CAACAGGATA TGGATATAGG
AT

SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGGGCCCCC GGCTAACGGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT
CCAGGCCTCC CCGGCTAGGT GGAGCGTGAC ACCGCAAAGC ACACCGTCTT ACCGAGGCGG GGGCCAGGCG GCACCAGCCC
CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GTTGGATGCT TTATTTCACT GTGGCGGGGA GGGAACTGG ACAGGGGGCG GCAGGCGGGG TGGGNGGCTG GCACTCAGGC
GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCCTGTGTA GGAGAAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCACG
GGGGTAAGGA GGGTGGGGGA AAACCTGGTC T

SEQ ID NO:2131: (Length of Sequence = 280 Nucleotides)

CTGAGTCTTG TCGATCCCCG CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GTTCTTGTTG ATGGTGTTCG
GGTCGGTCTG CAGCCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCA AGCAGACCAG GGAGATCACA ATGCCACCCC
AGGTGATGAC CGACAGCAGC AGCTCGTTGA TGCGGCCCTG GTAGATCTCA CCGTGAGCCA TGAGCACAGC GAAGTTGGTG
AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTTGGACT

SEQ ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATTGCCTGC TCTCCCATG GGGCTTAGC TCCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA
CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAATC AGTTTCCCA
GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCTCC T

SEQ ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAATG TTGTGACCAG AGGCTTGCCA TTNCCTAACT CTATTTGCCA GAGGAGCAAT AGTCTGTAT TCGCTAATTT
TGTGTTTACA GAGACTTTAA GGAACATGAC TGTTGGGAAT AACAAGAAAT AAAGGTATTT ATTTACTTNC TCTATATGAT
TGTAATATTA TACCCATACT

SEQ ID NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA
AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC
TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGAGACTT CAACCAGTIG GCTTCACAGC TGTGAGGCA CCCAGAGAAC
CTGGCCTGCT TCGACCTGTC CTTAATGAC CTGACTTCCA TTGACCCTGT CCTAACAACT TT

SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCTTACCAAT CTGACATTCA CTATCAACCA CTTCTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT
ATATCCTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGCTTCTGT TGAAATTTAG AGCTGGAAGA AAGGATTTCA
CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC
CGGGGACCAA CTCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAC G

SEQ ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCT TTGTTGTCAT GGTGATTTT GTACATTTC GCATTTGCAT CATACAAAGG GGGGAGCAAC
AGCCATGGCT TTTGGTCAGG TTCAGGGGGG CTGAGGGGGT GCTCCTCCCC TCCCCCAGG CACTGACACA TTGAAAGGAA
GCAGAGCAAC AATGACACAG CACGGATGTG GGAAAGGGGA TCCCCCAGC GGGCAGSATG GTCCATCTCA CCGGGTCTC
ACCAGGACTC CCCGCTCCA CCCAGGGCCA GCACGAGCAC CT

SEQ ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCTAGT GGATTTTCCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTGAGCTA
CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTCTTCAT TACTACTTTA ACCAGTATGT TAATACTGAA AATAGGTATA
AAGAAATCAC AAATAACCTT CTTCTGTTT AAGGAAATTT AAAATAGCAC ACTTAAATTG AAAGTNAAGG GAACTTTAAT
TCACTACTGT AATTTTAAAA TGTCGTATC ATGTAGTGT TGCACAGTTT TAACCTTAGT TTACCATCTC TTACTCCTTA
GT

449

SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCCGA TGTCTTATG CTTCCATCAG CAAATCTCAA TTTGTCAAGA TTCATGACAG ATTCTTCCCC
AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCCCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA
CAACCAGGTC CAAGAGCGAG TTINCCCCGA GCGGTTTGGC ACCATGTACC GAGGCACAGG CGGCTCCCC ACAGGCGTAC
AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCCCTCA GGACCTGCCC CTGTAGTTG GTGGG

SEQ ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA
CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAGG CCCTGGCCAA ATAACCTCCA AATGAAACAC TCAACCCAAG
GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAAGGAGA GGATACAAAG TCAGGTGAGT
AGGGGCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANT CTGCGCCCT CAGCTGTGGC TTCCCGCAT GCCTGTGAC CCCAAGCCGC AGGTACAGGA AAGAAGTTTG
TGCTGGGGGA CTCAAAGACC CAGAGGTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC
CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA
AGGGGTGACT GGATG

SEQ ID NO:2141: (Length of Sequence = 355 Nucleotides)

TTTAATTAAA TACCACITCA TAATGTIATT TGCACCTAGT ACTTTTTTTT TTTTAAATAA GACATGCCAT AAGTOGTGAA
GTTAACAAA TATAAGCATC CGCACAGAAT ATATTCTAAG GTGACTTCAT TTACACCGCT TCTCAGAGAA ACACACAAGT
AACCTTTTGT CTGCCTATCA GCCAGTGTG AAACAGCTTT GGAATTCACA TGAAGGCTG CCGGGCTGGT TCCCCAACAC
TNGCTGATG GAGTCCGTGA TCCGNACCGT GCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT
CCCTTCITTA CCCAGCGTTC AACTCCACAC TGCAA

SEQ ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCGCCCCAT TCCCTCCACT CACTCTTCCT TGCAGGTGGA
CCTGCCCTTC TTGCTGAGG CCTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG
TCTCTCATA GCTGCCCTCC ACCAGCCTGC TCTGAGACA CCTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA
TTCAGCCGCA CAGATGCTCA CTGCAGAGAT CTCCAAGGNC TGTGGTCAAT CTGAGCCCA TCTCAGATTT GTGTGGATAG
GGTGTAGAG AACATGGAAT CAGCTGGATA GAGTGGTTCA TGCTTGTAAT NCCAGCACTT TTGGGAGGCT T

SEQ ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA
CACGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCGCTGCCAC GGCCAACTCA
GGTCAGCCAG CCTGAGGCTG TGGCCTCCAA AGGGTCTGGG CGCACCCCC AGGTCCGAGG TINTGAGGC CAGCCAACCT
GCAGAGCACT CGCGGCGTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG
AGACTG

SEQ ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCCGG GTGATGTACA GCAGCGTCAN
AGCACCCCCA GGAAGTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

450

CACGGCGTTG GTGCAGCCCC GCACGTAGAT GACATCCTGC AACTGAAAC GCTCCTTGTC GATAGTTTTN TAGCCACACA
 TGGTGTGAC AACTTCTGTC GTGTTCTGA TGCAGCAGGT GTAGGGCACC CCACAGSCCA GGGGTCCAGG GGCCTGACG
 TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCTT

SEQ ID NO:2145: (Length of Sequence = 420 Nucleotides)

CGCCAGGAGC TGCTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCCCTG GTGCTAGAGG AGGATGGAAC
 TGCACTGGAC AGTGAGGACT TCTTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGTT GCAGTCTGGT CAGAGCTGGA
 GCCCTACAAG GAGTGGAGTG CTGTCATATG GCCTGGGACG GGAGAGGCCC AAGCACAGCA AGGACATCCG CCGATTCAAC
 TTTGACGTGT ACAAGCAAAA CCTTCGAGAC CTCTTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT
 GAGTGTGAC TTCAAGGAC TTGGCCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTTGG ACCTCCACAC TTCTGCAAGS
 CCTGGGCCAT ATGTTGCTGG

SEQ ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTCCCAAA CTATGTGGG CGGCCGAAGC ACATGCGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT
 CATCGGACCA AAAGCAGAGG AGCACCGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGGTG CGAGACTNGA
 ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGST TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGCTCCTC
 ACGGAGGCCC CGCTCAACCC GASTAAGAAC CGGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT
 GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TTGTGGTTG GAGAGAACT GGTGTTCTGC CCGGCTCTGC TTGGTCACAG ACAGCTCCAG CAAGAGCAGT TGTTAAAGT
 GCCAAGCGTG TGTATCACTG TGACAAGCCG TTGCTTACT GCCCTGTTC CTTNCAGCCA AACCAGCTGA TGAAGAAGT
 CTGCCAGGNG GGTCTACAG CAGGTCAAA ATGACCTAGT TTCATTTTAA GCAGACAGA

SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCTTTA TTACAAAAT ATTTTGCAAG CCAAAAAGTT TAAGTIGCAA CTATATACAA AATGGGGCCT GTTCCCTCC
 CAGCAGTCTT AAAATAAACT CCTGAAACCA TGCTCCCTCC GCAGGTGGT TCGACCTCTT CCTTTTCTG GGGTTCAATA
 CACAAGGTAT GTGGATTCTC CAGGTTGCCA GGCTAAAGCT AAAGCTATAC ATCTTCTTG GCCTTATTCC CTATTTTCC
 CCTCCAAGAA TTAATAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TTCTTTTAA ATACTGAATG TGTGTGTGCA
 TCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

SEQ ID NO:2149: (Length of Sequence = 394 Nucleotides)

GGGGAGACTT TGGGCTTTNN TCATGACTGT TTGGGTGAA GGTAGCTCAA GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT
 GTGTGTGTGT GTATGTGTGT AAAGTGCTAA GAAGTGTGCA TTGACATCCA AACATTTCTT GTACAAAATT TCCCTAGCAA
 AGCAAACCTG CTTTGACTTA ATTTATTTGT TAAATGTTGC ACTTTGTTTA TGTATGTTTT GTTTTTGGTG GGGAAATAAGG
 AGAGAGAGGA CGACAAATTC TATTGAAGTA TTTATTTTGT GAAGATGGCA ATTTTGCAAT TGTTTAAATA TTTTTCATTC
 NNITAATTTT GTTATCAGTG CCAGCCCAAN ATACCTGCTC TACCATTAAAT TTGCGGGCCT GATAAAAAGG GTCC

SEQ ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA
 CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG
 ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG

451

SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GTGCGCCCCA GTCCTTCTGA AACCTGATAT CACACTTCGG GCACTGTCCC CTCTACAGTC AATCTGTGTT TTCAGAAGTG
 GCCCCAGGTT CACTGTCTTT ACAGCAGTCC TAAAGAGCCG GCTGCCCTTT CCCTAGGCTT CCTGTCTCTT NAGGGCTAAA
 TTCCAGCCCT CCTACCCAG TGCCACTTGG GTAAAAATAC TCTGCTCTTC TCACGTTTGC TAATAAGCCC GGGCTCCGAC
 TACCACCGTT CGGGGAAGG GAGCCCTTA CCGTCATTGC TGGGTCCGCT CCGGGAAAAC ATGTGCCGGA CTGACTTGT
 GCGGCGGCAT CTTCCGGAA ATGCCGTTT TGTTCCTTC TAAGGGTGT

SEQ ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCACAAACA AATTGTGGGA GAAACACACC TTCCCAGCAA TAGAAAATCT CTATAAAGTG CATTTTGCTT GCAACCATCT
 CTTCCCCATG CTGGCCCTTG GGTGAGATT TGAGGCACTG TTCCGAGGGA GCCCTCAGGG CCACCTGAGC TGGGAGAAGG
 GAGGCATGAA GCCACCATGG AGCTCCAGGC TACTGGACAT ACCCTCTCTA CCTGCCCCCT CCCINTTGGC TCCAGGAGTG
 CACTGCCTGA CTCCACTGGC AGGTTGATCT GGGAACGGGC TNGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEQ ID NO:2153: (Length of Sequence = 325 Nucleotides)

CCCAGACCCA GAATGTAAAT NAGGCCAAA TGGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGTAT CINTGAACCT
 GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTTCOCAGG CTCAGAATCT GGAGTCCCGG ACAATAATTC GGGGCAAGAG
 GACCCGCAAG ATTAATAACT TGAATGTTGA AGAGAACAGC AGTGGGGGAT CAGAGGCGGG CCCCACTGGC TTGCAGGGAC
 CTGGNGGTCT GCACCACTTC CAGTGACCAC TTCAGAACCC ACCTNGGNGC ACCCCCCAAT GTGCTCTGGC AGACGGCATT
 GGCTT

SEQ ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTTAAT TAACATCTTT AAATGAAACA CAGTTTTCTT CATGTGTCTC ACTCAGGCTT CAGGGCAGAG GGAATGGATT
 TTTAGACATA TCAAGACTC AAAAATTAA AGAAATATAT ATATGTATAT ATATACTTCT AACATTTTAT GGAAATTAA
 AATCAGAGGC TTTTGGTCTC TCCATTTACT CTAGGTCAAG CTCATTTACC CCAGAGGACA AAGAAGGGCT GCCTCTCTA
 GACCTCCCT TCTCCTTGT CTTNGTCCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGTTTCCA
 GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCTGAAC ACACCTGCT ACTGNCAGCT GGAGCCAGG GCCTGATACA TCCTGCTGGA CCAGCTGGGC
 ACCTAGCTTT TCACGGGCGA GTCTATTCC CGCTCAGCAG TCAAGCGGCT CCAGCTGGCC GINTTCGCCC CCGCCCTCTG
 CACCTCCCTG GAGTACAGCC TCGGGTCTA CTGCTGGAG GACAAGCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC
 GGACTCTGGG CGGATACTTG GTGGAGGAGC CGAAACCGCT AATGTTCAAG GACAGTTACC ACAACCTTGC GGGCTCT

SEQ ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTTCCAGCTG GCAGCCAGT GGCCACCCA TGTCAAGCAC TTTCCAGTGG GACTCTTCAG TGGCAGCAAG GCCACCTGAG
 GCCCTGINTC CCAGCCACTT TCCCTCCTGG CACTGCCACC AGCCTCACCG AGTGGGCGA TCTCGGCTCA CTGCAGCCTC
 TGCTCCCGG GTTCAAGCAA TTTCTCTGCC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GGTGCGGCC ATGCCAGCT
 AATTTTGTG TTTTAGTAG AGACAGGATT TAACTATGTT GGCCAGGCTG GTCTTGATT CCTGACCTCG TGATCCGTC
 TCCTCAGGCT TCCAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEQ ID NO:2157: (Length of Sequence = 351 Nucleotides)

452

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
 GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
 CAGCGTCCCC TCCAGTCTGC ACGGGGAGT CCTCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGGC AGGCAGCCCC
 CCTCTATCCC TCCCAGCACC TACTACATCG NCCNACAT CCTGATTCC TGTGTATTG GAAACTNITG CCAGAGATGG
 AGGTCTCTC GGAGTATCTG GGAAGTGTG C

SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTCACA GGGAATCAGA GCTCAGCCAG
 GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAATCAGCT CTGCTCAGCC AAATCAACAA TTCAACCCAA
 CAGGNCAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG
 GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGGAAAGG

SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTTGTGCGTT TCTCTACCA GATTGTGCAT GCCTCTGTG GGCAGAGCCT GTNCTGACTT GCTCCTGGGT CTCCAGCATC
 ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTCCCACT GTCAGAATTG AGATGAAGGA AGCCAGAGA
 AATCAAGTAC CCTCCACCAG GCAGAGCAA GTCTGGGTG CCCAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG
 AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC
 TGGGCACCAG GGGTGATGCA GT

SEQ ID NO:2160: (Length of Sequence = 376 Nucleotides)

ATCTTAAGAC ACATATGGAA AACAATAGGG TAGAACTTAG TAAACTACAA GAATATAAAT TGGAGCTAGA TGAAAAGGCA
 GTGCAGGCAG TAGAAAAATT AGAAGAAATC CATTTACAGG TTAGTTTTT AAATCAGGTA AGTTTATCTG TAATGTGCTT
 TCATTTATTT CACCGCAAAT TATATTTTGG ATATGTATAT ATTATGTTTC CTCTGCCTCT CTTGTAGCAA TTTGCTTTGT
 AGAGTTCTAG AAAAAAATG GCATCTGTTT TTCTTTTAA ATATTACAT TTCCATTATT ATTATAACAA AATCAATCTT
 TCAGAGTAAT GATTCTCACT GTGGAGTCAT TTGATGATTA AGATCCAGTT GGCATA

SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTTCCTCG GTTCAACTG GACTTCTATC AGGTCTACTT CCTGGCCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC
 TATAAACTCT ACCAGCAITA CTACTTCTG GAAGGTCAA TTGCCATCCT CTATGTCTGT GGCTTCGCT CTACAGTCTT
 CTTTGGCCTA GTGGCCTCCT CCTTGTGGA TTGGCTGGGT CGAAGAATT CTTGTGTCCT CTTCTCCCTG ACTTACTCAC
 TATGCTGCTT AACCAATC TCTCAAGACT ACTTGTGCT GCTAGTGGG CGAGCACTTG GTGGGCTGTC CACAGCCTGG
 CTCTTCTCAG CCTTCGAGN CTGGTATATC CATGAGCAG TGAACGGG ATGACTTTC CTGCTGAGTG GATCCAGCT
 AACC

SEQ ID NO:2162: (Length of Sequence = 339 Nucleotides)

CATGCTT TGTAGCTTG GGATCTAATT TGTAAACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAGCA
 ACTTGCCATT TACTAACTT AGGCTAACCA AAACCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC
 CAGAGGACCC ACCACTGGG TATGTTTTAG GCCAATGGAG CAATTCAA TTTGGCTAAA AGAAGAAGAA ACTCATTTAG
 TATGGCAATA ATATTTGCGT TCGACACAAA GTGGCAAACC AACACATTG GCCTAAACAT GGTCTATAT GTTATAATGA
 TACTTTACAA TTAGACTTC

SEQ ID NO:2163: (Length of Sequence = 285 Nucleotides)

453

CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TTGTGGCTCT GGGAGCTCCG CTTTTCGAAA CCCAAAAGG CTGTGCATTT
GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGTCTGTTT TGTGGACAAA GCAAACTGTG GAATGGCTTC TCGGTGTCTG
TATAAAGGGA CAAACGGTTG CATTCAACCCT TTGTACTATA ACACCGCTTC TGCATTGCC ATATCCGTTT TTAAACCTTT
TTGTCTCCGG GGAATTCTC ATTCGATTAT NATGCTCTCT GATGA

SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGTTTGTA ATCACTTCCT TTCTTACAA TATTTCTAAT AAGAAAGCTT ATAACAGCAC TTTATTGACA CCTCGGACC
CGGGGCAGGG TCAGCAAGAC TCCAGCTGG CATCAGACTG TGTCTGGCCT GCTGTGCCA TCCCTGAGGG GTGCAGGACA
GAGCCCCATA GGGCAGAGAG GCCTCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC
TAGGAGGAGA GGTGGGCTCT GGCAGCGGT GTNAGGTGGC AGTGAGAAGC CAGGCC

SEQ ID NO:2165: (Length of Sequence = 310 Nucleotides)

GTTTTGTGA TGTMTTCAA ATAATGTTTT TCIGTGTGTG TTTTTTINCT TTTTTTGGAC AGGNTCTCAT TCCATTGCC
CAGGGTGGAG TCAGTGGTG CGATCTCAGC TCACTGCAGC CTGACTTCC CAGGTTGAGA TGATTCTNCC ATCTCAGCCT
CCGAGTACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTTTT TGTATTTTA GCAGAGACGG GGTMTTGCCA
TGTGACTCAG GCTGGTCTCG AACTCCTGGG CTCAAGAGAT CCGCTGCCT TGGCCTCCA AAGTGTGGG

SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAACT GGAAAAAAA TAATTGTAA GCAACAATTT TAGATTTTTT TATGGAGGAT AGAGACATTT GAATCAGATA
CCAAGAAATG TATAGTAATC ACTCACATAG AAAGATGCTT AAAATGGATT TTAAATGGGA TCGGGGAAAG CAAGGTGCTG
AACACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAAA CTGATGTCAG TACTAACACA GGTTGAAGTG
GGATTGTGGC GGAGGGGAGA GGTAGTINAGG GTAGACTTAT TTGTACCATT TTATTTTTTG ATATTTCTTT TATATACAGA
TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCT T

SEQ ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCTGGGCTG TGCTCTGTTT GAAGGGGGCG CCCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC
CTCTGGGTGA TGGCCTCTTC CTCTCAGGG ACCTCIGACT GCTCTGGGCC AAAGAATCTC TTGTTTCTTC TCCGAGCCCC
AGGCAGCGGT GATTACAGCC TGCCCAACCT GATTCTNATG ACTGCGGATG CTGTGACGGA CCAAGGGGC AAATAGGGTC
CCAGGGTCCA GGGAGGGGCG CCTGCTGAGC ACTTCCGCC CTCACCTGNN CCAGCCCCCTG CCATGAGCTC TGGGCTGGGT
CTCCG

SEQ ID NO:2168: (Length of Sequence = 348 Nucleotides)

GGAGAACCCT TCGCGGAGGA AAGGCGAACT AGTGTGGGA TGCCACCAA CTGGGGGAGC CTCTTGCAAG ATAAACAGCA
GCTAGAGGAG CTGGCACGGC AGGCCGTGGA CCGGCCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT
CCTCGGAGGT GGTGAGCTAT GCCCCATTCA CGCTCTTCCC CTCACTGGTC CCCAGTGCCC TGCTGGAGCA AGCCTATGCT
GTGCAGATGG ACTTCAACCT GCTAGTGGAT GCTGTAGCC AGAACNGNTG CCTTCTGGA GCAAANTCTT TTNCAGCACC
ATCAACAGG ATGACTTTTA CCGCTCGT

SEQ ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTTTGTGA GTCCAGTTT GGGTGGCAGA AACTAAGACA CTGAGCTGAT GAGAGAACTT GTTGCTTTTC GCCCTGCGCA
TTTATTATT TATTATTTA TTTATTTTGT TATTTTGTAGT AGAGACAGAG TTTACCATG TTGGCCAGGC TGTCTCAAA
CTCTGACCT CAAATGATCC ACCCACCTCG GCTCCCAA GTGCTGGGAT TACAAGTGTG AGCCACCATG CCGGCCACC

454

TGTTGCATCT TTAACAGCTG TGTITGGAAA AGGGTGAGGA ATTGATTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG
AATGCAGCCA ATTGTTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTGTTGTGTG ATGCTGTGTG TGTTCCTTC TGTITGTTTT TCTTGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA
CCAACTGAT GCCAGTAGGA TTGCCCTGT ATAGGGTGTG TGACAACCCC TGTGAGGGT CTCACCCTGT TGGGTGGCAC
ATGGAATAGG ACCCATTTAA TGAAGCACTT TNCCTTGG TGGAGGTAGT GTGCTTTNCT GGGGAAAAC CCCTTGTCT
GGGCTGCTG GATTCTCAG AACTACCAGG AGG

SEQ ID NO:2171: (Length of Sequence = 357 Nucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGGCAGCAG
CAACACTAGT AAAAATTTAC TACTTTGATA GGTGCACATC TTCTTTTGGT CAGCAATTTT CTCAAAACCA CTGTAACATT
TTACTAAAT GCTAAGCTTT GATTGTTTT CAACACTCTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCCTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT
GAACACACAC CTCCACAAA TTACAAATTA TCTTCCA

SEQ ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGCCC CATGGAGCTA AGGCCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG
CAAAGTGGCC AGCTCCCATG CCTTTGCATG CATTINTCTT TACCTCTGTC TGCTGGGAA CATCTTCCA GGAGCAATCG
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAAGATGT TTGGAATAT CCAGGAGTAG TGTCAAACAC
TAACACCATA TTTACAAGTC TAATTTGGAA CCTGGGCCCT TTTAAGTGC AGGAGGAAGT T

SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTTCCGG GAGCGCTGA AGGAGCTCGT GGTCCCCAAG CAGTTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG
GCCTGTGGA CAACACTCC TCGGAGTCA ATGTCACCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG
TACAGCAACG AGAACCTGGA CCTNGCGCG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA
ACGCATCTG GAGTTCAATTG CGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCT
GGCGTGGGA AGACCAGCAT TGCTCTGGTC C

SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG
CTCGGTGGCT CCACTGCCAG GTCCGGGCG GCTCCCCACA GCGCTCAGTT CTGGCCAGA CAGGGCTGA CATCCGCCG
CTGCAGTCCC GGGGTGGCG TCACCGTTC ACGGCCAGG ACTCTNCTG CTGTCGGG AAGGGATGT CGAAGATCTC
CCGGTAGTNT TCCACGAAG TAACCTCCAG GGCCTCGST GATGAAGGCT TCCAGGTCT AGAAGTCC

SEQ ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTTGCCCAAG GGCCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGTNTGAG GCATCTGCC ACCTCCATCC
AGACCTGGAG CAATCCCTGA GAAGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT
GTCCAGGCA ACCAAACAGC CATTATCAG TAAGGAGCCA GAGTNAAGGC TGCTAGTTCA GCCCCGGAA GGTGTCCAG
GGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTTCCAAC TGAGCCTGAT TTCCTCCAG TGTCCACAAG GGACATCTG

455

ACCTGGAGGT CCTCGGCTAC TCACCCTGGG GCCTNCCTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCCTC TAAATGTTTC
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTIN CTTAAAAGTA CAATAAGCTT
AATAGTGTTC TAGGAAGACA AGATAAAAAT TACTCAAGGC TAGCTTGGTT CTCACTGAAT AAAAACAAAG GACTAAATAC
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCCTTGGT CGCTATATTG GTAATCTCTG GGGTAGTCAT CCTGGTACTC
GCCATGATAC TCATCAGGGT ATTCTGCCTG ATAATCACTA TCACTGATTT CCGAACCATT TGTTCCTGTT CCTTGGCTTC
CGTTGTGAAT GACAGGTTCT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCGN CCAAGGCCAT ACAAACTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGTTTTTATA AAAATCAGAA TTTTTCAAAT GCATTTGGTCA TTTTCAGATG CATTTGGTCAC ATTTCAATTAT TCCATATCAA
AAAACCTGCAT TTGTTAATGT CACACAAATC TCATTGGAAA GGTCTTCAAG TATTGTGAAG TTGTCCAGGT CACAAAGATG
AATGCTAGTT TTTCAAAATT CTACTTTTFA CTTGAATGCT CAAATCTTAT AATTGGTAAAC CCGGTCAGTT TTCTTTTAGT
TGATAGGCIT ACTGCTTTTA TGTGTGAGA ATACTTGTCT GTGAAACATC CAAATCTGGA AG

SEQ ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTTCAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT
CAATTCTCCT GCCTCAGCCT CCCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NTAGGTTTTT TTTTGTAGA
GACAGGGTTT TGCCATGTTG CCCAGGTTGG TCTCCAATC CTGAGCTCAA GTNATCTGCC TGANGTGCTG GGATTATAGG
TGINAGCCAC CACATCCAGC CTCCTTTTAA TGTTTTGTG ATTATTTATA GTGAAAGATT TAAATTCCIT TCTATTTCTT
TGTGGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGTGCAG TTCACAGTAG GGTTCATGCT
CCTATGAGAA CCTAATGTTG CAGCTGATCT GACAGGAGGC AGAGCTCAGC TGGTAATGCT CACTCACCTG CTGCTCACCT
CTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGGTCTGC GAGTTGGGGA CCCCTGCAGG AAGTCTTGTA
AATGCATGTC AGGAACTTA CTGTTTACAG CCACATAGTT TGTAGTAGTA AGGAACTAG GACAATTCAA ATATTCATCA
NGGGGAAAAC TGGGATAAAT TGTGGGTCAA TTTCATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTTGCT TTTCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCTTA AAACACCTGG GCTCCTTAAG
CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGGNGA GGGGTCCCA GCCAAGCTCT GGNACGGCCT
GCCATGGGGC AGNCCTGAC CGTNCAGCCA GAGGT

SEQ ID NO:2181: (Length of Sequence = 244 Nucleotides)

TTGGGTGGGA ACGGGCCCGG AGCGGGAGGA ACGTGACTCC CCAGAGGGAA GATGGGCATC ATACTGGGCC CAGAGCTGGG
AAGGAGTTGC TGCCAGCACA GGGTGGGCCT GGAATCCCTT CGCCCCIACC CCCAGTGGTT GTGGCTGTAG CCCTAAGCCT
GGAGAGCAGG ACCGCCCCGG GTGTGNTNGN AGGCTGCCAG GTGCCTCCCA GAGCTCCCAA GGGCCCCCAC CTGCAAGTNC
CAGC

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

456

CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCATTTCAGC CAGTCTCAAC ACAAACACC CAACAGGGAT
GCACTCAACT TGTGTTTCC ATGTGGAAGT AGGTGGCAGG GCGAGAGGGA AAGTAGTAGA AGGGGGCTAT GGTGTGTCG
CAATCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA
CATTATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAGT
GGTGGGAGCC TCTCTGGTTC TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TTNTTTATAA ATAATAGATA
TTATAGGTAT ATTTCATAT TTTTACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC
AATTGCAAAA TGTTTAAACC CTGGGAAGCT TTGCTTAGG AGGGCGGATA TTCTGTGTG ATGTTATTCT ATAGCCATAA
ACTTCCCTGA ATTTCCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAAATCCTA
TGAATATAAG TCAAACCCCT CTGCCGTGC TGGTAATGAA ACTCCTGGGG CATCTACCAA AGGTTATCCT CCTCCTGTTG
CAGCAAAACC TACCTTTGGG CGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAGAG
AGCAGTGAGG AGCAAGATAA TGCTCCCAAA TCAATCCTGG GGCAAAGTCA AAATATTGA GGAAGATGN TCCACAAGGC
CAGGTTACAG AGGAATGCAA GGAGCTTCCA GGAAGCACA GAATTCCAAG TTTTCGGAAA TTT

SEQ ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCAGCA GTCAAGGAAG TGGGAAAGG GGAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA
CATTACTTGT TGGATTGTA ACATGCTACC ACAATATATA CAGTAAATA CCTCTTGGGA CAATGGTACA AATTTTGT
CCTTTAATT TGCTTTTCTG GTACAGGTAA GATCATTTT AAATCACTTT TTTCCTTTAA ACATGAATAC ACAAAGAAA
TGGTTAGAAG TTTCTTGT TTAATAAGC ACAGAATGCG GGAGGTTAAA AACACATTTA TAGTGCTGAA TACCAATTGG
NCATCACT CTATACATTT TTTGCTCAA TTCTGTAC

SEQ ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGGTGGT ATTGTCTAGG AATAAAGGG ATAATTTTGG TTGTTACAA
AAGTAACTTG TCTAGACCA CACATCAGAA AAACACAAA ATAGCACACT CTAGTTCTAA ACAGCTATGT CTAAATAGA
TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAACAG ATAAATATTT GCNCTGAGTA GGTGTTTAT
AATATAACAT TTNCCTATCT ATACAGAATG AAAGCCAAA AGTTAACTGT ATAGAGATGT GCAGAACAAC ATTAATATT
ATGGCTCAA AGCAGG

SEQ ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCATTNTCA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCACTCC ATGACTGTTA ATAATAACAA TAATAATAAA
ACTACTGGCC AAGCACGGTG GCTCATGCCT GTAATCCCAT CACTTTGGGA GGTGAGGTG GGCAGATCAC CTGGCCCAAC
GCCACGCT CTAGCTCGG GCTCCCTGAG GTCCCACTG CCTTNNCCGG TCCCACGGCT CCCACGNTGC CACCTGTCC
TGACTCGCCA CCTGGTCTTG TGGGCAGACT GCTGATCGAG TTCACCTCAC CCATGCCCTT GGAGGCGGT GCAGAGGGAG
AACCCAGG

SEQ ID NO:2188: (Length of Sequence = 335 Nucleotides)

457

GGCCCCAGCT CCTCTTCCTG CCTCTNINAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGGT CAGACTGTGG
 GTCCCTGCGT CTCCTGCCCA CTCNACCGG GCTTCTCTCC TCACGCTTA GGGTCTGTCC CGGGTACTCA GTCAGCCCCAG
 TGGGATCTTA CCCACTTCCC TGCAAGGTGC AACTGCCCA GGCTCAGGCT GCCCAGCGGC TCTTCTGTGA CAGTAAGAGC
 AGGCTGGGGC GCTCTTTTCC TGGCCCCGAA GCGCAGGGG CCCCTCTCC AGAGCCTINGG CGCAAGGAAC ACAAGGCTGC
 CGCTGCTCTT CCAGG

SEQ ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACTGGTGA TCAGATCGAN TTCTACTTTT CTNATGAAA CCTGGAGAAG GACGCCTTTT TGCTAAAACA CGTGAGGAGG
 AACAGCTGG GATATGTGAG CNITAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACAC
 AGCACATGCT TTGAAGTATT CAGTGGTCCT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCGTCCCA
 CTGTTCCCA ACGAGAACCT CCCAGCAAG ATGCTCCTGG TCTATGATCT CTACTTGTCT CCTAAGCTGT GGGCTCTGGC
 CACCCCCAG AAGGAATGA AGGGTGCAAG AGAAGGTGAT GGAACA

SEQ ID NO:2190: (Length of Sequence = 333 Nucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT
 AATCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGGA GTTCGAGACC AGACTGACCA ACATGGAGAA
 AGCCCATCTC TACTAAAAAT ACAATATTAG GGGGCGTGGT GGTGCATGCC TGTAAATCCCA GCTATTITGG AGGCTGAGGC
 AGGAGAATCG CTTGAACCTG GGAGGCGGAG GTTGCACTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA
 AAATCCGTC TTC

SEQ ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGTTTATAA AAGTTTGATT ACTGGAAG TCGATCTAA TTCAGAAATT TCAGGCCAAA TGAAACAGCC CTTCAAGCA
 AACATGCCIT CAATCTCTCG AGGCAGGACA ATGATTCATA TTCCAGNGT TCGAAATAGC TCCTCAAGTA CAAGTCTGT
 TTCTAAAAA GGCCACCCC TTAAGACTCC AGCCTCCAAA AGCCTTAGTG AAGGTCAAAC AGCCACCANT TCTCCTAGAG
 GAGCCAAGCC ATCTGTGAAA TCAGAAATTA GCCCTGTGTC CAGG

SEQ ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACGG CTACCTCGAG GTCAITGGCT TCACCATGAC GINGTGGCC GCGCTGCAGG TGGGCGGACA CGGCGAGCGG
 CTGACGCAGT GTGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCCGGT GCAGGTGGAT GGCGAGCCCT GCAAGCTTTC
 AGCCTCAGGC ATCCGCATCG CCTTGCGCAA CCAGGNCACC ATGGTGAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG
 CACAGCGACC AGCAGCCGGT

SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GGTCTAGCA CTGCTGGGT GACCGCGGG AGCAGGCAA GGAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGCAGGGA
 ACAGACCCAG GNTCTGGGA ATCTCTTCT GCTAGCTTT GCTTGCTGC CAGAGCAGG CCTGCGGTTT GGGTCTGTIN
 ACCNTCCGGG GGCGGGGAA GGGCAAGNA GCGGATCTC TGAAGTCCG CCCAACTTCG CTNCTGATCC CCCAAGGTCA
 GAGAGGG

SEQ ID NO:2194: (Length of Sequence = 399 Nucleotides)

CTTCCATCTC CGGGTTCAA GCGATTCTCG TACCTCAGCC TCACAAGTAG CTGGGATTAT AGGTGTCCGC CACCACCT
 AGCTAATTTT TGCAITGTTA GCAGAGATGA GGTTCGCCA GGTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAAGTGAT
 CCACCCACCT TTGTTGGCCT CCCAAGTGC TGAATTACA GGCAACATGT AGCCTTTGAG TCTAGCTTCT TCCACTAGCC

458

TAATTCATTT GAGATTCCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTTTA TTTGTTCTGT
AGCATTCTGT TGTGCAGCTG TGCCCCAGTT TGTTTANCTA TTCACTCTCA GTTGTTTCCA GTTTTAATGA CAACTTCAG

SEQ ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTTCTTGACC TGCAGGGCTT CAATTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT
ACATAAATNA TATGINTAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA
ATAAGTGGGA CT

SEQ ID NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAA AAATTATTAT CTCCACTTTA CCACTGCTGA CACTTCACCA ATGTAGGGCT CTCAGTGACT AGCCAGGGT
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCCCT TACTCAACAA GTATTTATGG
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCITGACCT TGACCCCTGCA TCCATAGTAT
GAGCATTTTA ACTGGGGGAG GGTTTGCAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTTG TG CATTGAGTGC ATCCCCGCTG GTGACTAAGC TCGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCTC
TCCCTTTGTG TTCTATACAT TGTGAATCTT CCGTCTGAA GAACGCCAG CCTGCCAGA CAAAGCCCCG CCTTNCCTAA
AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGAGGGG GGCTCAGAAA GGAGAAGGGC TGTGATCTCC
GGTCCCTTCC CCCATCATCC TTCCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCATTAAA AGG

SEQ ID NO:2198: (Length of Sequence = 360 Nucleotides)

GGTCTCACTA TGTGCCCAG GCTGGTCTCA AACTCCTGTT CTCAGCGAT CCTCCTGCCT CGGCTACCA AGGTGCTGAG
GTTACAGGCG TGAGCACTGC ACCTGGCTAG GAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA
AGAGAGAGTT CTGGGTTTCA GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTCGGCTC CACTGGCTGG ATCTCAGGGA
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAGA
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEQ ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTTGGGTAG TACCCITGCC CTCTTCATGG CCACTTCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT
ATCATAAAGT ATTAATACTT TGTATATAAG TCCTCCTTGA GCCAGGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA
AGGAGCAAGG ACTTGGGCTT CTCCAGCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG
GCTCACAAAA TACTAAAGCT GGGAGGAAAC TTGGAGATCT ATAGGTCAAA CCTCCCCAAT GGGCTGATGA GAAAATACAC
GCAGGCCTAG CATGGTGCTT GCCACCATGG TGGGATCCAG TATGGTTTTA TAAA

SEQ ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGGC ACCTGAAATC CCTACTCAGG AGGCTGAGGC AGAGAATGCG
TTGAACCTGG GAGGCAGAGG TTGCACTGAG CCGAGATCGT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT
CTCAAAACAA AACAAGCAA CAAACAACAA CAACAAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAAGTG
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAA GTGATTCGTG ACTCATTGTC

459

TCCTCAGTCT ATAGCAITAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG
ATTATCAGGA TCCTGG

SEQ ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTTCAA AATAAACCAG CATACAGACC AATTGCAATT TATAGAAAAA ATAAAAATGT AGAAACATCA
CCTCCTCTCC CCGACCCCGAG TACTGAAATT ATACTTCCTC AGACATACTG CCCCATCACT GGGAGGGTG CGGACAGATT
GGGTACATTT ATAGANTATT AAATAATTAA GTAACAGAGG CACCGTTTTT GCATGTATGG TCCCAAAGAC TTTTCAACTT
NTTTTCAAC ATTACAGTTG TTAAGAATGG AAATTGAAGG AATTGTACAT ATTTTCACTG GCAGTTTCTT ACAGA

SEQ ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCTCTGTCAC TCAGCCTGGA GTGCAGTGGT GTGATCTCGG CTCACTGCAA CCTCTGTGTC GCAGGTTCAA GCAATTCTCA
TGCCTCAGGC TCCTGAGTAG CTGGGATTAC AAGCATGCGC CACCATGCCC AGCTAATTTT TGTATTTTAA GTAGATACAG
GGTTGCGCT TCCTGACCTC AAGCTATCCA CTCGTCTTGG TCTCTCTCAG TTCTGGGATT ACAGGTATGA GCCACCATGC
CTGGCCGGAA TATATATATT TTTTACCACT CTATTTCCAG TGCCTAGACT AAAACCCAGC ACATGGTACA CGTCATACAT
AAGGAAGG

SEQ ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTTGTGCT CGTCGCTCAT GCCACCACTG GGACCNACGG GGT CGGG AGTGGTTTTT CTGGCTTGTT TCAGCCTTTT
CAGGCTCTCT TCATCTTCT TCACAGAGTT TAATACATCT GACACGGTTT CATAGTACTT ATGAGTGCIT TCACTGAGAG
TGCCCTCTAG CCACTGCTGA ATTATGCTT GTTTGAGCTT ATCCTTGCTT CCGCTCTGAA GCTGGAATAA GGGCTTCANA
GCACTGTCCA CATAGGAGGA AGCTTTGG

SEQ ID NO:2204: (Length of Sequence = 353 Nucleotides)

GTAAATCINA GGTCAAGGAT GTCCCATGAT GGATGATGAC TGANATGGAC GGAAGTTTGG TTTGAAGCGG TGGCATTGGT
GCAGGCTGSC AGAGGGGGCA GTTCTGGATA GAGTGCTCTG ATGAATGGGG ATACTCATGG GAGGTGATGC AGATGAGGAT
TCINTGCTTC TNAAGGAGGA GCCAGGCATT TAGAATGGCA CTGGAGAGCA AGGACTGACT GANCCCCCTC ACTGTGTCCC
CAAGAGGCCA GGAAGGGAAG ATTGGAGGAG ACAAAGTTGA AGTGAGTTTT CCAGGGAACG AGTCAGTTAA GAGATGGTAG
GATCTTAAGG GAAGATGGCT AAGATCTTAA GGG

SEQ ID NO:2205: (Length of Sequence = 265 Nucleotides)

GTTCACCAT GTTGCCAGG CTGGTCTCAA ATTTCINACC TCAGGTGATC CACCCCTCCT CAGCCTCCCA AAGTGTGGG
ACTACAGGCG TGATCACTG CGCCAGCCG TGGTTTTTTT TTTTLAGAAA CAGTGTTTTG CCATGCTGCC CAGGCTGGTC
TCAAATCCAT AGGTCAAGT GATCTCCCA CCTCAGCTC CCAAAGTGTG GGGACCACAG GCATGAGCCA CCATGCTTGG
CCAGAAAGAA GTTGTTAACA AAATG

SEQ ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAAGCTTA TTTTTCAGT TGTGGGCTCT AGTTTGGTTG GGAAACTAAT TCCTTAGACC TGGGTCACCC CTGGGCTCC
CTTAATCTCC CGCATATGT TCCTCAGAAT CAGGGCATGG TGTCTGCCC TGGTGGGACT CAGCCCGGTT GCTTGCACA
GACTCTGGGC CAGGSCAGGA TGTGGTGTG TGCCGGGTGT TCGCCGGGTG TTATCTGTGG CGCTCAGTAT GGTGCATAGT
GTAGACAGT GCCCTAGGTG GTGTTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGGC ACAGTGGCTC ACGTCTATAA
TCCAGCACT TTGGGAGGCT

SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GTGTTTGTTC CTCTTTCCAC CATAATTGTA AGCTTCCTAA GGCCTCCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT
CTGTCCCTTTA TAAATAACCC AGTCTGAGGC AGTTCTTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTTCTTGAGT
CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGACTTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT
TTNCGGAGGC TGGTAGTGTT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG
TGTATTATGA AGGATCTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCCTGCT GTGCACATTG CTTGAGATGG CTAATTATAT CTTTGGACTG TTTGTACAAC CATTGACAAA TATACTTACT
TTCAATTTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAAA TTGAAGAAAA ACAAATAAAC AGNAATTAAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGTTGAGA ATCCTCCATC CAGCATCTTC CCTGGTCACA TGGTCCCAAC CTTTGTCTCC ACCCCCTTCT CTGTTCCCCC
CGCAGTCCAT GCTCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC
CTTCTGTATA GAGCAGCCTT CCCATCTTGT GGACTTGTCT CCCATCTTGT GGACTCGGAG GGTTCGAGC AGCGTTGAG
GTGANGCTCC TATGACACCT CCNCCGTGAA GGCCTNCTCA CTTTTCATT ACCAGTGAGG CCTGCCACAG CCGATTGTGT
ACTCTGATCC TGGCAGCAT GGAAGCCATC TT

SEQ ID NO:2210: (Length of Sequence = 338 Nucleotides)

GTCTTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCCTGG TTTAATGTTG TTGTGAGCCC
TGTGGAAATA AAATTAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAGCTAA GATGTATAAG
ATGTTTATAA ATTINCTATT AGAAAATACT GCTTCTTAA AGGIGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG
CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA
ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTCTCTGGAG TACCTCTTC CCCCACCCC AGACCTGCTT TCAGAGCAAA ACTCAAGTCC CTCTTCTCTC GTGAAGCTTC
TCCCTCAGCT GAGCAGTGAT CACTTACTCA CTCTTAACCC CAATCCGCTG ACTGGGTGGG GACAGCACGT CCAGCCTTCC
CACCTCTCT GACGGCTTCT AGACGGAGTT TCAAAAACCTG ATGAGCCTCG ATCCAGGGCT TGAAGAAGC CAGGGTGTA
TCTGTTCAT GCATGCTTCC CCAGAGNCTC GCCCAGTGCC TGGNACATAG TAGGCACTCA ATAAATGCTG AATGGGTGAA
TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCTCAG TCTCGTCTC CAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA
AGAAGAGAAA CTTCTAGAGA GAACAAAAGA TCTCAGCCAA GAGTGAAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCA
GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT
CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAGTAA GAGTTCATCA TTT

SEQ ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGTGATAA ACAACTTTAA GCTTATGTTT CTTTATAGAT CACTGGCTCA CACATAATTC AAAACCCACA
CAGAAGCTAA GAGTCTTTAC ATTAAATATA TTCTTCTTAA AAATCCTTAC TGTATGCATC TGTCTCAAG CAGTAAATTT
TGATTATGCA CCATTTTATA ATTAATATGT CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTTA

461

AACCCCTTCT ACTTCTGAGC TGGGGGTAGG GGCACACACT TGGGATTGGT TCTTCAAGTA TATATTTTIN CCAAACATTA
GCTTCAGTGA AGAGTTCTGG ATGATTTTCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAGACGTCA CAAGGCGCAA
GGTACATAAC GGTGGGTACA TAT

SEQ ID NO:2214: (Length of Sequence = 259 Nucleotides)

GTCATGGAGA TCCACAGCAA GTACINGCGC TGCTGACAGG ANCAACCTCC ACAGCGGGGC GTTCTCTGAT CGAGGCTCAG
ACTTTGAGGA ACGAAGAAGC CGAGACGGTC ACCGCCATGG CCTGCGTNTC CGTGGGGGTTN AAGCCCGCCG AAAAGAGACC
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CCTNTAGCAC TNCCTCGAAG NTGCTGTTCT CTGTCTGTG TGTCTCTGTG
TTTAAGCTCA GCCAAGAAA

SEQ ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCACAG AACTGCTGG ACACACTGAA GAAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA
AATAAGTCGC CCCTCCAAAA CACGNCCTCA TCCACAGCG CTCGCGAGCT TCCACCACC GCCCGCTCA GTTCTTTGTC
GTCTGTGTC TCCCCAGCCC TGACGCGCCT GGCTGGCACT GTTGCGGCTG CATTCTGTG TTCAGTATG CCCTCTTCTT
GTTTGAANCA AAGAAAAATA ATGCATTGTG TTTTTTTTAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT
CATGTGGCAA TTGGTGACA GCAGGAGGAA ATTTCTTGGG ACTTNTTTAG GNTGAATT

SEQ ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT
GGAAGAACTC AACTGAGAGA GAAACCTTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTCGG GCCTTAGTAT
GCATGTACGA TCTCAGAGTG GAGACAAGCC CTATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCACGCTTA
TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTGTA TGTGGGAAAG CCTTTGCAGT TTCTCAAAT
CTTAGTGGGC ATTINAGGNA CTCACACTEN AGGAGGAAGG CCTCTGAAGT NTNAGATATG TGGGGNAAGT ATTTTGGGNN
ATCCCCCAT GTCITTAATA ATCCCAT

SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GTCATCAGAG TTCATCGTGA ACACCCGTGA TGCCGGCTCG GGGGCTTGT CTGTACCAT TGATGGCCCC TCCAAGGTGC
AGCTGGACTG TGGGAGTNT CCTGAGGGCC ATGTGGTCAC TTATACTCCC ATGGCCCCTG GCAACTACCT CATTGCCATC
AAGTACGGTG GCCCCAGCA CATCGTGGGC AGCCCCTTCA AGGCCAAGGT CACTGGTCCG AGGCTTTTCC GGAGGNCACA
GCTTINACGN NACATCCAG GTTCTTTGTG GGAGACTNIN TACCAAGTCC TTCTTAAAG CCGGGGGCTT TCAGGTTACA
AGNTTCCATT CCCCAAGTT TTTTCTCAA AATNNCCAGC AAAAGGTGGG TTGACTNGG GGGCCCTNGG GNTTTTCCCA
GGGCTTTC

SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCTTTAT TTATAGAATC TTACAAATAA AACATTIACA GTCCACATAA GTTAATTINC TTTTCTAATT
TCTTCTCATA CACCTGAGTT ATTTAAAAAA ATACTGTGAT GGAAGTGCAG AACTGTAAAG GGAAATAAGA ACAATAAAAT
CCTAACCTCT CTGCAAAAA TCAGACAACT TTGTTTTAAA GTAGATGCCC AGCATATTGC CATCTCTTTG GAAGAGGACT
TACTATACTC AGCTCTTAGG NTACCCAAAC AGAGAAGCCT TCTTTTTAAA ACCCAAGGTT AAGGGCCCG TGAAGG

SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GGCTTCTGT CCCACAATT TCTCAGGTG GCGCTGGAC ACAGCAGCCA CCACAGTCCA GGCTGCGAG GCAGGGTGTG
ACCCTGCCCG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTCGGAGGG GGATCGTTCT TTGGGCTCAG TCTTCCCTC

462

CTCCAGTGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCGAAG
GCTTCAGAAG CGGCCTCACC TCTNGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTC AAGACACTT

SEQ ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
CCTCTATCCC TCCCAGCACC TACTACATCG NCCTNCACAT CCTGATTCC TGTGTATTATG GGAAACTINT NCCAGAGATG
GAGGTCTCTT CGGAGTATCT CGG

SEQ ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCAGTAGCG CAATCTTAGC TCACTGCAGT TTTGACCTCC CAGGCTCAAA TAATCCTCCC
GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTTTGT AGAGATGAGG
TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCAGNCTC CCAAAGTGCT
GGGACTACAG GCGTGAGTCA CCGCGCCTGG CTTTGTITTA GGCATTCTTT TTCCGCAGCA TCTGTTACCA GCAGCCTGAA
GNCATTTCTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GTCTCCTGTA ATTCCCCCA ACCGTTCTT GAGGATGTGA AACCACCTTA TTGGGCTCAA TCCCATTTGG TCACAGGATA
CTGTACGTAT CTNCCTTTCC AGAGATTGA TATCACCCAG ACACCGCCAG CATACTATAA CGTGTACCA GGTITGCCCC
AGTACACCAG CATATATACA CCCTTGGCCA GCCTTTC

SEQ ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTTTTTTTTT GCATTTTITAG TAGAGACGGG GTTTCACGT GTTAGCCAGG ATGGTCTCAA TCTCCTGACC TGTGATCCA
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGGCCAACT TTTTGCATGT TTTCTTTAA
ATTCTCTAC TTTTAATTGT ACTTCTAATA CAGACACTTC TGAATCAST TTTACATTG CTGCAGCCTT ACCAATTGT
AGANACTGTT TATGTGATGT TTTGATTCTT CATTTATATA

SEQ ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATTGCAGGC ATGAACCACT GCGCCAGTC GAGTGGAAT ATTTTGAAAG GAAACCTTTT TCTGAGCAGG TCTCAAAGA
GAGGTTAAAA TACTGAGTAG ACCATGCTGT AAACAGATGT GCTGTTATTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG
GCAGAGCTCA GAGTAGATTT AATGTAATC TGAAGGGCAC TAGGATTTIN AGAATGGTAA ATAAGCATTG GCTTCAACTT
AAATTCAAAT CTGCATTGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTTGTTTTC TCCTATCTAG
CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAGGC TGTCTGCCC AGGCGCGGTG GCTCACGC

SEQ ID NO:2225: (Length of Sequence = 420 Nucleotides)

GGTGGAGGAG CCTGGGCGCG GCGGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGNGG CGGAGGACGA GGATCTCTGG
CAGTCAGCGC CGCTCGGACG CCGCGGCAC CATGGGCTGC TGACCCGAC GCTGCTGCT CATCTGCCTC TGCGCGCTGC
AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCT TGGTTTCCAG TGGGCGCTA TTCTTGAAA TTTTCTACAC
ATAATAGTTG TCATATTGGG TTTGTTTGGG ACCATTCACT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC
ATTCAATATC TCTGTACATC GGTGATGGT GAGAGAACAT GGGGCCTGGT TGINTCAAGA AGAGTGCTGC CTTCCCTCAA
GCCCCATGCG ANNGATGGAC

463

SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GTACCTGCTC CCTGCCGGCA CCTTNTTGG TGGATATTTA GCTGCCCTCT ACAGTGGTTA TAACATTGAA CAGATCATGT
 ACCTAGGCTC GGGTTTGINC TGTGTCGGTG CCTTGGCTGG CCTCTCCACC CAGGGAACAG CACGTCITGG CAATGCACTG
 GGCATGATTG GGGTTGCTGG AGGACTGGCA GCCACCCCTCG GAGTCTTAAA ACCGGGCCCCA GAATTACTAG CTCAGATGTC
 TGGAGCGATG GCTTTGGGTG GTAC

SEQ ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCACCTGGG CAGGGGCGCT GGCACATTCC TCAGATTCTG GCATGTCATC CTGGAAGTAC TCAGCCTGGC
 GGTACTGCCA CAGACGCAGG TTCCCGTCCC ACGAAGTGCT GACAATCTTC TCTTCAAAGG GGTGCCAACT GACGTCACGC
 ACACAGGCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA
 GCCACTGTAG ATGAAGTCTT GCCCAGTGCT ATGAATGGGG GAGAACCGGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC
 CCGGTAGGT CATCAAGGAG CTGTCCCCTG GGAGCTTCAG TTTCGGCCAG GCTTTTITNG GGCACITTTCT GCCACCGATA
 GT

SEQ ID NO:2228: (Length of Sequence = 394 Nucleotides)

TTTAAAGTGG AAACAATGTT TTTAAGAGGT GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGT TGATTCTATG
 TGGTGGGAGG GAGGGGAGAA TGATTCCITT TTCTAGAATC AGAGAAATTG GAAAGTATCA AGAAAGATAA TAACAGAAAG
 CATGAAATAG AGTTGTGCTT TGAAGATGAA TTGGATGAAA TTNTTATGTG AAGAGGAGTT TTCCAAAGTT GCAGACCCAG
 GATTCTTGSC CAGAAGCATG AAAACGTTTC TTTCTTACTG TTTCTAGGAC CTAGGCAGCA TTTCTTCCAT GTCTGCAACA
 ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATTCA TCTGCTTTGG ATCCCATGGA CAGTCATGGT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTITAG GATGATTGAG TGTTTCTTTA AAAATAAAAA CCCACAAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA
 GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGCCT
 GGTCCGCCGA CGTCACAGTG GATGGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACGCAGA
 GCAGCAAGSC TGAGCATGAC CACTGGAAAT AAATAAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA
 AAACAAAAAA GCACAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GTGGAATGCA GCCATCACAC AGTAGTTTCT GAGATTGCTT CCGTCTAGGT TTTATGGGAA GATATTTCTT TTTCTACCAT
 AGGCTTCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGT TTCAAACCTG CTCTATCAAA AGGAAGGATC
 CACACTGTGA GTTGAATTCA CACATCACAA AGAAATCTCT GAGAATTCTT CTGTCTGGGT TTATAGGAAG AAATCCGCTT
 TCCAACGAAG GCCTCAAAGC GGTCCATATA TCCACTTGCA GATCTACAG AAACAATGTT TCCAACCTGC TCTATCAAGA
 GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GTCTCACTTT NINGGCCAGG TTGGTCTCAA ACCCCTGGTC ACAACAATC CTCCAGCCTC ANCTCCCAA
 AGTGCTGGCA TTACAAGCAT GAGCCACCAT GCCCAGCTTA AGGGGGATAT TTTTATAGAG CATCTTGCCC TGGTTCTGGA
 ATTCTCTGTA GATAATACAG TTAACAGATA TTCCCTAAG TGATTAAGAA CCTTTCCATT TGACTGATTT INCAGAAAAG
 TTTACCTATG TAACCTCAGT GGGTAGCACA ATGCTTGACA CATCTTTGNA GCTCAAATGT CTCT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

464

CCTGCCACTG AGGCAGGTGC GGGCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG
 TCCGGCCCTT GCTCTTTGAT TGTGGGCAGC CTCTGCCCCT CTCTGGSTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC
 CGGGCTGGT GGTCTTGAAS GCCCTTTTCC ATGCCGACAT CATGTCACTC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG
 TGATGCTGTG GTTAAGTTTG CTTGACCCCA GCAGCCCGAG GGA CTGTCTG AGTCACAGCA CAGCCCTAT TGCCTGGCTG
 CTGGTGTGTG GGTCAATTTC CAGCAGATGA ATGT

SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCACGATGCA GGCCACTNCG ATTCCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT
 GACCTGTGTG ATTGGCGGGA CATCAAGCAG ACGGGCATCG TGTITGGGAG TTTCTCTGCTG CTGCTCTTCT CCGTGACCCA
 GTTCAGCGTG GTGAGCGTGG TGGCCTACCT GGGCCTGGCC GCACTCTCAG CCACCATCAG TTTCGCGATC TACAAGTCTG
 TTTTACAAGC AGTCAGAAA ACCGACGAAG GCCACCTTT CAAGGCCTAC TTGGAGCTTG AGATCANCCT TTCTCAGGAG
 CAGATTGAGA AGTACACGA CTTGCTGCA GTTCTACGT AACAGCACAC TTAAGGAAGT NAGGAGGCTC TTCTTGTCC
 AGGACCTGGT GGAT

SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGTGCCAT CTGGACTUCC ACCAAGTGCA ACACCCINCA NTGTGCTTT TGGACCAGCA
 CCAACAGGAA TGATCCCTC CGTGCCCTCC ACCGGACCAC CTCCAGGACC CCCAGCACCC TTTCTCTCTT CCGGACCATC
 ATGTCCCCCA NCTGCTGGTC CTTATCCAGC CCCAACTGTG CCGGGCCCTG GCGCCACAGG GCATATCCTA CACCAATAT
 GCCCTTINCA GAGCTACCCA GACCATATGG TGCACCCACA GATCCAGCTG CAGNTGNTCC TTTAGGTCCA TGGGGATCCA
 TGTTTTNTGG ACCCTTGGGC GNCAGGAATN GGAGGSCAGT ATCCTACCCN GTAATATGGC NATATNCATN TNCA

SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTC GCTTTGCGTC CTCGCTACAA ACGCCTGGTG GACAACATAT
 TCCTGAAGA TCCAAAAGAT GGCCTTGTA AACTGATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA
 CTGGATCGAA TTGGTTCTTA CCTGGCAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCTGGGTATG TTTTGATTGC
 TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTA AGCCATTGT AGAAAGCTTT CTTCATATGG
 TGGCAAAGCT GCTGGAATCG GGGGAACCA AGCTTCAAGT TCTTGAACA AATTCT

SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TGGCAAGAAC ACTGAAACCC AGCCAACCTC TCCTCAGCTA GGGACCAAAA CCTTTTGTG TGTAGTCTT CCGAGGTTGG
 AGACTCTTCT GCAGCCAAGG AAAAGGTGCG GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCA GGAAAGCGCC
 TGGACGCAGG TCTACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGCG GCCTNNGGAG GAAGGCCACA
 CCCCAGCAGC GCTGTGCCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCGAC TCGAGCTTTA ATGCGCCCAA
 ATNTGGGCGG GGGCAAACCG GCTCTTGTGC GACGGCACAC GCTTGGAGGA CCNCAGTNAG CTGATCTTCT GCATCGAGA

SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTTTTAAT ACAGTCTGAT CAGATCAATT CACATCACAA GGTCAACCG GGCTTGCTCA CATGTGNCAC
 AACTGAGGTA CACAATGTCC CTACCTGCCG GCTGTCCAC CTTCCTGGTT CCCAACAGCA TTGAAACCCC CTACTTCCCT
 GACCAGACTG GCATTTTTTA AAATTTTGCA TAAACTATT TCTTCCATAG NCTTCAAACA ATCAACTAGC CAAG

SEQ ID NO:2238: (Length of Sequence = 369 Nucleotides)

465

ATTTAAGGCT GTACTTAACT AATTGGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAAGGATTTG
 TCATGGTGG TCACCTTTTA AAGTATTTGA TTAGTGCAAC TGGAGAATGA AAAGTGTATA TTGGTGACGC CAACCTCAGT
 TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTCATCGGGG TGAAAAAAA AAGGCATTAC CTGATTACACA
 CCCCTGTCTT GCTAGCCCTC TTCCATTCTT TTCTACACA GCACTTTGCT CTGTTAAATC CTCTCTCTGT CTCAGACCAT
 TGCCTGCCCC TTCAAAGGGT ATGGTTCAGG CTCCTTTCAA GACATTTGG

SEQ ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCATTGCT ATTTACAACA AATAAATATT GCCCTCCCC AATCAGTAAA CAAACATTTT
 TTTTCTTTT TTGCTTTTAA TACAAATATT CAATCACCCC ACCCCCACCC CAAATCCTCC TTCTCACTA ACCCCCGTCT
 TGATGGTCT CGTAAAGCCC AGGACGCAGT GGTGAATGGC ACTTGCACTG GCATGAGATT CAACATOGAT GGGACTCAGC
 TGGGACTGTC CTCCTCACC GGGTGCAGAG TCTGGTCCAT GAAGAGGGNT TCINTCTCTG CTCCCAGGGG AGGGCTGGGG
 TAAGCGGTGG GTGAGACTCC CTCCTCTCA GTTGGNCTG ATGATGGAAT CTTINGTGCA GCCTGAGAAA GGCTAGAGT

SEQ ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTTTCAGAAT TCATCTCTGA CTTTAATGGC TTAAGCAAGA ACAAGGTTTC CGTGGCTCCC CTTGGACTGA ATGCTGGAGG
 ATATATACTT CACAGTCTGA GGCTGGTCC CAGGAACCTG AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT
 TTCAGGATGG AAGTTTGATT CTTGAGATG TGAATCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC
 CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG
 CCTCAGTGCC TGANCCCTAG GGGGATCGA GTTGGCTGCT GGATTCATTT CTTGCAAGCA GGCTGCA

SEQ ID NO:2241: (Length of Sequence = 377 Nucleotides)

CTCCATTTTG TCCTAGTTAC TTTTAAGGTA TAAGCTGAAG TCATTGATTT GAGATGTTTC TNCITTTCTA ATATAGGTGT
 TTAATGGTAC ATATTTCTCC CTAAGTACTG CTTTAGTGGC ATCTGCAAA TTCTGACATA CTGTGGTTCA TTTTAATTCA
 TTACAAAATA CTTCTTAATT TCCCTTTTGA TTTCTCTTT AATTCATGGG TTAGTTAGAA TTGTGTIATT TAATTINCAA
 GTACTTGGCG ATTTATCTCT CTCTGTTATT CATGTCTAAT TTAATCCCAG TGTGGTCTGA GAATATATTT NGATATCAAT
 AAAGCTACTC CAGCTACCTT TTGATTAATG TTATCACAGT ATATCTTTTT CTATCCT

SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAACACAC ACACACATGA CAACTCTAA GTCTCCAGAC AGACACCCCTC AAATAGGCAC TTGGTGTGTT
 CAGCTGGGGG CTGGAGAGAT CTGGGGCTTT GGCTCCAAA GGNAGGAGCT GCTGTCCCCA GAGAGGAGAC AACAGCTTCT
 GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCTAGGTA GATGGGAAGG GGGCCTGTTT AAAGAAGACC CCCCACCCCC
 ACTGCCCATT TCACCACAAC AGTGAATTGC TGGGAAGTTT GTGCCCTGCG GATTTCTGAA TATAGTGGAC AGGCATTCTT
 AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTTAAA TGTGGGCTTT GCATGTTTTG G

SEQ ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTTATT AAATCAGACT GTTATCTTA ACAGTTATGT AAGTTACATG TATGTTTAAG TCAGAGTATT TCACATGGAA
 AAGTTTITAA CTCCTATAGG CAAGCAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACTGCTAA ACATTCAAAT
 AAGGCAAGTA TATAAAACCA ATAAACAAT AATGAAAAA TTCAAGCATT CCTTTAAGAG AATTCAACAC TACAAGCTAA
 ATGTACTTTC TGAGTGTATT CGTATAATCA AGGCAGTGT TCTCCTTTTA AAACATCAGG AAATGGAATA AGGCTCATTA
 GTAGATACAG CTGCCCTCAA GATTTCAATT TCAGTTTGC

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

466

ATATGTACTA CATTGGTGG AATACGCATG TACAATTCTT CAAAAATAGT AAAGAGCAAA ACAAACAAA AATAGTAGAA
 GCACTGGAGA AATACACTAT GGCATAAAT AGTTACGGGT GGGATGTCAC ATGGACCATA TCTACACTCT GTGGCAACCT
 TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT
 CCTAAGCATT TTATTTTATC TCAAAATATA AAATATTCAT CAGTTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC
 TTTGATAGGN GTTCTTGTT TTCTTGATTT CATGTTTCAG AG

SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCATTGTG GGCAACGGGG AGATTAAAGCT GCCAGTGGAG ATCAGTGGGG CCATCGAGGA
 GGAGTTCAGT GTGGCCCGAC TCTACATCAG CAAAATCAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG
 AGAACCTCCA GGTGGAGTNT CACCGCAAGA TGGAGTINAC CGGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG
 CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCTATGA
 CTCCTTGAGC GAT

SEQ ID NO:2246: (Length of Sequence = 347 Nucleotides)

AAACTAGCTT TGGTGGGAAC TCCCTCACC CTGCTCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA
 TAACCCAAAC ACCCCACCAG CCCCATCTC CCAACACCAC CACACTGGGG ATTAAATTTC AATGTGGGAT TTGGAGAGGA
 CAAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAATTTTAA ATTACAGTAT TTAAATTAGA
 ATCATTTGTG GAGTTTCTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG
 AATTTTAAAA CAGCAAAATC TCATACT

SEQ ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GTCCTGTCAG CACAAGCACT CCCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCTCT
 CCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCCAG GCTGGACATC TTTACCAGGG
 GCTGGGAGAA AGCAGGCGGT GCTCTGTGGT CTCAGAGTCT TCCTGGCGCT CTTTGAACCC TGACAGAACA TGACCTCAGT
 CCCAGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAACA TGCCCTTCTT CGCAGAGACA CGAACAATCT
 CGTCTCTACC AGAGGCCTGT GAGACATCAG CTCAGGA

SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTAT TAATGGCTAG AAAGTCAGGT TCACCAAGG AAGTCACTGA GGGGCCACAG CATTGAAGGG TATGGGGTTT
 GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAAC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA
 CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTCGG TCCGGAGGGA GGCAGTCACG GGCTAGGGCT
 GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT
 GGCACCT

SEQ ID NO:2249: (Length of Sequence = 404 Nucleotides)

ATTTTAAAT TAGGTTTGT TTATTTAAGT TTAATGTAA TTCCATGCTG TGTTTCAGTA AGAACAATAC AGATTCTGTA
 TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTTACA CATACTGAAC AAAAGAGGTT GAGCGAGGGA
 AGGAGGGGAG GAGTGAGGGG AAGGAGGTAG GGGGAGGGG AAGGAGAAGA AACAAAAGNN TTGAACAGGC ATGCAGGCTT
 TTCCATACCA CCTTCAAGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG CAGCCACGGG ATTGTTGAAC
 TGTTACCAG CACCATGCTT TTCAGCAACA TTTTCAGCG AGTTTGGGA CATTTTTTTA CCAGCAAAA CCATTACACC
 GAGT

467

SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TGCCAAATAT ATATATCTGA ACATAGTGAA AAAGTAAAT TTAATAATCAG TCAAATTATT TTTAAATTC CTTTGCTTAA
 TAGCCATTAC TTAATCACCT TTTGTTTTTG TTTTINCCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCTTTCTA
 TACATTCTGC CTTTCATCCTT AAATTGTTCA ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT
 GTACAGAAGT TGGTTGATAT CGCTGATTCA CTTTT

SEQ ID NO:2251: (Length of Sequence = 426 Nucleotides)

GGAATAAGGA GATGAGAGCA TGCTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCTACTACA TCAGCTCAAG
 AACATAAACA AAAATGTAAT TTAATAAACA GATGGTTTAA AAAAATATCT GATAAAAATT ACCTATCCCT CTCCTTGCT
 GTGAAATAAT TTAATAAATT TATTCTAGAT GTAAAAATAA TAATACAAA AAGTTTGTTC AAAGACACCT GTGTCTGTIT
 TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC
 TCTCTGGATG CAACCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCACTTCTC TGAGGGCTAG
 GGCTTTGATT CTGAACATGG GGGGCT

SEQ ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAGATAA ACAAAATTAA TAGACCATTG GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG
 CAATGAAATG NGAGCTACTA CAACTGATAC CACAGAAATA CAAAGATCA TTCAAGGCTA CTATGAACAC CTTACCGTGC
 ACAAACTAGA AAACATAGAG GAGATGGATA AATTCTGGGA ATTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA
 AAGGGTAAGA GTGGGGTGAG GGATAAAGA CTACACATTG CATACAGTGT ACACTTCTTG GGTGATGGGT GCGCC

SEQ ID NO:2253: (Length of Sequence = 335 Nucleotides)

AGATTATTC TCATGTACAA AGCGGTCAGC CCACGGGACC ATATACGACA GTTGACAGGA GTCCTAGAAA AACGCATCIN
 TCTAAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCTT CCCCCACCCC ACAACGCACA CAGAATGAAA CGGAGAAAAA
 GAGAGAAGCC AGTGGCCGGG CTGACCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG
 CCTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGTCTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG
 GAACACTTCA GGGG

SEQ ID NO:2254: (Length of Sequence = 380 Nucleotides)

GGAAGGCTCT GGAGAGGTTT CTGCAGGATT ACTTTGATGG CAATCTGAAG AGATACCTGA AGTCTGAACC TATCCCAGAG
 AGCAATGATG GGCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAAATA ATATACAATA ATCACATCCA CTTTCCACCA
 CCTACACAAA AAACATTTCA TACAGACTGC AGTACAGTGA TTTTTTTTTT TGAACATAAA GGTCAAAATT GTTTCATTTT
 CTCTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAACCAA AAATAAATGT CTAGGGCCCC
 GAACCCATCT GAATGGGACC CCTCTCTCA GCCAAGGGCA TTCCAAAATT AACCTGCAA

SEQ ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTITCTGTG ATTCTNCAGA GCCCAGGAGT CAGTCTGGT GGTGGAGGG ACCTGCCCCC ACTGGTTCAT
 TTAACCTCT GTCTCGGTGC CCTCAGAAC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG
 TGATCIATTC ATTCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTC TCGTCCCCGC CGGATCTGCA CTGCCAACTG
 GGATGGGTT CGAACAGCTT CATAACATC TTCAGCATTT TGTACCATCT GCTCCCCAAT GGCCAAAATC ACATCACCAG
 GNCCAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGNAAG

SEQ ID NO:2256: (Length of Sequence = 371 Nucleotides)

468

TTTTTTTTTT TAACGTGAAA TGCTATTTTA TTTTAAACAT TTTTGTTTAC AAAAAAAAAA AAAATCAATG ATTGGTACCT
 TTTTACACT CTCAGATTCC TGAATATGGA CAGATCTTCA AAGGGAGGAA GGAGTTCTCA TATGAAATTT AAGATAGACT
 GTCTGAAGG TTGTGGGGTG GGGTTTTTTG TTGTGTTTAA ATTGCTTTT GTTTTTAAGN CACAATAAAG CTAAATGTC
 AAGTCTCTGG GAGAGATCCC CTAAAGTTT CAGTCAAGGA GCATATCAGA GCACAGACAA GGGACCCCA GCCTGGTGCC
 CGCCGGCCCG TCCCGGCTGC CCAGNGTAT TTGGTAGCGC ATGGGTTGAG A

SEQ ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACCTATGG CACTAATGTA TGATGGATTC ATTTCCAGAC TGTCGGCCAC GGAAGCACTT CTTTCATGGCC TCTGCCCTGG
 ACAGCAGCCT GTCTCCGGG CTCCCATGT TTTTACCAGC TTCTGCTGAG TTTCTACAAT CTTGAGCTCT GCTGAGAATT
 CTTTTCTTG AAATTCCTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC
 AAGAAGTTGT TGATAAATGG CTAAAGTT TTTACAAGAA GTAACCTCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA
 TTTTCCAGAT AAAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAG AG

SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTGCAGC CTCCCGAGAA CTTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT
 TTTGTATTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGGGGGTCT CAAACTCCTG ACCTCGTGAT CCACCCGCT
 TGGCCCCCA AAGTGCTGGG ATTACAGGGG TGAGACACCA CGCTCGGCCT TTATATATAT TTNAGAGAG GGGGTCTCAT
 TTNTTGGCC AGGCTGGTCT TGAACCTCTG GGCTCAAGCA ATCTTCCCGC CTCAGNCTCT CAAAGTGCTG GGGATTACAG
 GCAATGAGCC NACCGTGNCC

SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCAGAT CCCACTGTGA GGAGAACGCC TCTGCTAACA TTTTCTCTAT CTGTGTATCC TCTGGGAATG AGACCCACTA
 AAGGGCTAGA GTGTGCTCA GTGTGAATTC CTCCTTCTCG ACTCCATCTT CGGGTAGCT GGGACCGCGG TTCAGTGGCC
 AATATGCAGC TCTTTGTCCG CGCCAGGAG CTACACACCT TCGAGGTGAC CGCCAGGAA ACGGTCCGCC AGATCAAGGC
 TCATGTAGCC TCACTGGAGG GCATTGCCCC GGAAGATCAA GTCTGTCTCC TGGCAGGCGC GNCCTGGGA GGATGAGGCC
 ACTCTNGGCC AGTNCGGGGT GGAGGCCCTT ACTACCCTGG AAGTAGCAAG GCGCATGCT TINGAGGTAA AGTC

SEQ ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTTT AGATCTGAGA TTCCTTTAAT CAGAAGCAGC TCGTCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCAGC
 CTCTAGGACT GNTCCCTAG AGCGAGGCTC GGGCTCTTGG TAAAAAGCA TTTGCTTGAT TTTATTTAAA CAATGGTGAA
 TCTTCAAGGT GCCAGTCTAC ATGCCAACA GTCTCCAGG NTTCAAGGNC ACAGTCACCG TCACTCAGAG ACTGCCCTCAT
 TINGCAAGAG AGAAAAACAG TGACCACCAC AGAGGGCAGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCGCTA
 GAAACTGGGG GCCACACACA AGNGCCANC AGGTGCGCC

SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTTT GAGACAGAGT CTGCTCTGT CGCCAGGTTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCGCC
 TCCGGGTCC AAGCAATTC TCTGCTCAG CCTCTGAGT TGCTGGGACC ACAGGCGCAC GCACCAGCC AGGCTAATTT
 TTGTATTTT AGTAGAGAG GGGTGTACC ATATTGGCCA GGCTGGTCTC TTCGAAATCT TAAATCCAAA CATTTCTATT
 CTTCTAGATC CTTGCTCAG GCGAATCCTT TCATCTTTCC CTATAGCTC ATCAGCATGT AAGTGTCTTG ACATCTCTCT
 TCTCCTTCCC TATTAGCTCT CTACTCTCTN CANTTACAGC

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

469

CTGTCAAAAA TGTATTATAT CAATAATTTT ATCAGCAGCA TTTAAGAAAT AAGAAATCAT TAGACAATAG AAGACAAACA
 TGGTAATGCA GTCAGGCCAG CACACAATAC ACGTTTTC TAACACACTG TAACCTGAAT CCTGGCAAT TTCCTAGAGG
 TATTAACATC ATACCTTATT AAGAATTATT GGGCCCNAGG AGTNGGGGGG TGGGGGGGTT GCAATCTGTC CAATCAACAT
 CTGGCTCTTA CTTTCTCCCN GTAGTATTAC ATTTGTATAA TATTCTTATA GGAAACAACT CAACTCCATG TTTATAAAG
 CACCATACGG TTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAAGT TGACATGGTC AATGAAGAAA TAGGCAAACA GCAAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA
 AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGGC TAATCACCAT AACAACTCCC ANTAAACTTG CCACGCTCAG
 TGTTCGAGCC ATGCCCTTC CAGAAGAAGT CACCCAGNTT CTGGAAGAAA ATAGTGANIT GATTCTGTCT ATGGAGCAGT
 TGACATCCTC TTTGAATNAG GGTGAAAATA CTCACATGAT TCATCAGAAG ACCCNNGNGA AAATTTNGGA ATTCAAAGGA
 AAACITINAG CAACANCTAA CAGGGNGNTG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTTACAGTC TAGAACAAGC TTTCCAGCC CACAGCCAGG GATGGCTTTG AATGTGGCCC AACACAAATT CATAAACTTT
 CCTAAACAT TATGAGATCT TTTGTGATT TGTGTTTTAG TTCATCAGCT ATCATTAGTG TTAGTGTATT TTGTGTGTGG
 CCCAAGATAA TTCTTCCAAT GTGGCCAGG GAAGCAAAAA GATTGGACAC CCTGGTCTA GAAGGAAAGG CAAATATTAA
 ATAACCTCAG AAAGTGATAT TACAAATGT GGTGAGTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG
 GTGAGGAAT TCTTATCAGG GNAAGTATAT TTANATGAAG GGCCTTAGGG GATGAGTAGG G

SEQ ID NO:2265: (Length of Sequence = 301 Nucleotides)

CACCTCTCCT CCA'CCCTGCC TTTCCACAGC AGTCAGTCTG GTCCAAGCCA CCATCATCTG TCACCCAGAC TACCATAGCC
 ATCTCCTAAC TGGTCTCTCC ACTTGCGTC TTTATCTGTC ACACAGCAGC CTGAGTTCAT ACACACAGCT GCATTCAITC
 ATATTTTGCT TAAACTGTT CAATGGCTTC CCATGGAAGT TGGGAGTCTG GATATCTTCA CAAGTGTGTN GCATGGCCCA
 GGACCAATCT GGACACCCCT NCCTGTTGT NCATNCATGC CTGSCACCAC TTTTGGCT T

SEQ ID NO:2266: (Length of Sequence = 360 Nucleotides)

CGCCTGCATG CCCCAACA ACACAACTTT ATTCTCTCC CAAACATCTG TCAGGCCTGG CCTTCTGAG CAGGAGCTGA
 GCAGGAACAG GGCCCTGGCT CCTCTCTCT GCCACAGCTC TGACCTGGGC AAGGCTGGAA GCTGGCATCG TAATGGATGG
 GGGAGTGGGT GGAGGATCTG AGGGTCCCT GGGTAGGTTT CGATACCTTG GACAGGTGGG CCTCATCTG ACTTAGAACT
 CGGGGAGGGG CCACTCTTCC TTCCCTTCT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCTCGA CATGTGTNCC
 AGAAAACCCA GCCATGAGGG ACCGCTNIGA GGAAGGGTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTCT CGCTCTGTCA CCCAGSCTGG AGTGCACTGG CAAAATCTCG GCTCCGGACC CCCCCAAGAC ACATATGACC
 CACCACCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGGG CTCTACCTT GGGAGATCA CACTGACCTG
 GCAGCGGAT GGGGAGGACC AGACCCAGGA CACGGAGCTC GTGGAGACCA GGCCTGCAGG GGATGGAACC TTCCAGAAGT
 GGGCGGCTGT GGTGGTGCT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC
 ACCCTGAGAA TGGGAGCTTG TCTTCCAGC CCACCATTC CCATCGTGGG CAINATTGCT GGNCTGGTTC T

SEQ ID NO:2268: (Length of Sequence = 191 Nucleotides)

470

CTTTCCTCTC CTGTTACAC AGTATTCGAT TATTTCATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTTGTTT
CAATGGTTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGCA GGTTTTTGA AAAAATGAAT TTAGACAAAT
ATTTAGTAAC TGTATGATAT ATAACCCCC N

SEQ ID NO:2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TTTTAAACAA CACTCAACTT TGTGAACCCC TGAAGATTTT TIGACCGTTC CAAGTCTTAA TGCCACACCA
CTATTCCAGC GAATTTATGC TACAACCTGGT AACAAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC
NTACCAGCTC TGGNCTATAT TGCTCCCATG CATTTAATAT ATTATNNGT TTTATANCCA CTCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGTTAAG GAATTTCCIT TATTTTTTAC AAATTAAGAC TATGCAGATT TCATATATTT CTGAATCAAA AACACCTTTG
TCTTCACAGT ATGAGTTAGA ATGCAGCCTG AGCTGAAAT CAAGAACTA GAAAAGAAAG TGGTAGAGAT AACTATATTA
AAAANCTGTT AGGTATTTCC TTAAAAGTA GGTGTTTTT TTTTTTNC NICTTTTTT TTT

SEQ ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCCTAGCA TCACCAGCAT
CCTGAGCTTT GTCTTGITGTT GGGAGTCCCA CAAGGGCTGG TGCAAGGNTT AGCAGCTGCT ACTTGAACCC TAATCCCTGG
GTGGATGTGG TCTCTGTGTA CTTAAGAGCA AATGTTTGTN ATGACATGCA CGGGTGGGCA GAGGTTGAAA AGAACAGGGG
TCTACGGAGG AGCCAGGCCA GCCACGTGAG ACCCTTCTTT CTAAGTGGC TTCTGTCCA TTCTGGGGA TINGGGGAAA
GAACGACAGA ACTTACCTTC CATCTCCTT CTCACAAGCA GTG

SEQ ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCAGCG CTTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC
ATGGTGAAC CCCGTCTCTA ATAAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGT TAATAAATC ATGTATAAGC AAAAGACCTA TGAAAGTATA AAACAGACCA ATGGATTTTA GTATAAAAGT
ACAAAACGTT CATTTAGGTG GGTTCAGTTT TOCCACAAA ACTAACCTTT AAGAACTAC CACTTATCAA GTTTTGGTAT
AAGGTATAAT ATGAAAGAG AAAATCCATA ATTATTTGAA AAACACGCTT TAAATACCTT CCTTTTTTCC TACTACATAT
CTCTATTAGG CTGGGTTTTT TTCACAACTA ATTGAATACA AAAACAAATA TGAGNATTTA GCTGTAATCT ATTAATCCCG
ACATTACAGG

SEQ ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TTGCAGTGGT ATATGCCTAT TGTCCAGCT AATCAGGAGG CTGAGATGGG AGGATAGCTT GAGCCCAAGA
GTTTGCGACT GGGCCTGGGC AACATAGCAA GACCTATCT CTAAATCAAT CAATCAATCA AACAGTGGTA TGCCACCCAG
AATAAGTATC TTTTTTGAAG TAAAAACAA AAAGCGAAAT GGGACAACA GGTCTGGTAG TGGTGGCTGT CTGTCAGTA
CAATGAGGTC TCTGCAGAGC CGTTCCTTAC CCTNCCCAAC CCCCTAGACA TCAGGTCCCT TTCTAGGAA AATGAGAGCA
CAGACCTAGG NCCATGNGCT CCCAACTTT TTCTTCTCTT CACTACAGAT TC

SEQ ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATCTTTT TCCTGAGGAT GTTGGTTTTA TATGGATTGT CTTTAAGCAT CACTTGGAAA CGCTACAAAT AATGCAGCTA
AATGTTAAG CAATTAGGAA ATAGGAATTT TTAAATACAG AATTTTGCAC TGCAGAGTGT TTACAAGTAT TAAAAGATTG

471

TATTACACAA CTGTGTGTTAA ATTCTAGTAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACTTGCG
 TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCTTT GTTGGAAATAT TTTCATTG AATAGTTACA GGAAAATTTA
 TTTGCATATT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

SEQ ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGTC CTGGAGGCAA CCGCAGAAAC AGAACANTGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCGCCAGCT
 GCAAACACCC CTGACATGCA GCGTCTGTT TAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCCTGGC
 GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAAATCCC ACGTGGGAATA TGATGGGGTC CGAGCCAGCC
 AGTAACTCCA NGAGGGCTGT AGTGTGTAAG TTCGGCCAGA GTTTCAGAT ATAATANCAT TGGCCCCACG ACGTAGACCT
 GTGGCGGCTC AGGGTTAAGA GACGGGAGC

SEQ ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTTATATAG ACTCTGGTTC TAGAACTCG CCTGCAGCCG CTGGCTGGAC CAGCACAGCG TGACGGGGCC GGACTATTTA
 CAGGCCCAAT GCGGGCTGTA CCTTGGCCAC CTNCCGGCAC GGTGCTCAGC TGTGACGCA AAATAAGTTA GGGCCGGCCG
 GCGGGGGCG GCGGGGACG GG

SEQ ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTTT CCCCAAATGA AGCAAAGCAA GTACTGGGCG GGAGTCATCA GAAATACCTT GGGAGGTGGT GGGGAGGGGA
 GTGGGAGCA TCAGGGAAAA CCCATCTCAA CTCACGCTC TCAGGGGTG CCACTGGAAA NTCTTGGT TTCCATCACT
 GGTGCAGAAA GAACTTCCCC AGGAATGGCC AGTGGCCTTT CGCCCGTAAC AAGGCGCAC GCTCAGAGCA GTCTTCTCC
 TGGGCTGGGT GGACGCGGAG GCGCGAAGGA AAGCCT

SEQ ID NO:2279: (Length of Sequence = 193 Nucleotides)

TGCACCCATG GCCCCTCCA GAGCCCCAGG GCCCCTGAGC AAGCAGGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG
 AAGGCTATGG CTTTGG GGAGATGATC CCTACTCAAG TGCAGAGCCC CATGTGTGAG GTGTGAAACG GTCCCGCTCA
 GGTGAGGCG AGGTGA CCTTATGCGC AAG

SEQ ID NO:2280: (Length of Sequence = 401 Nucleotides)

GTGATTTTCC TGTCTCCGTC TCCTGAGTAG CTGGGATAC AGGTGCCAAC CACCACGCC AGCTAATTTT TGTAGTTTTA
 GTGGAGACGG TTTCGCCATG TTGGCCAGGC TGGTCTGAA CTCCTGACCT CAGGTGATCC ATTCCCCTCG GTCTCCCAA
 GTGCTGGAAT TACAGGCATG ACCCATGCG CCGGCCCCA CTGTTCCCTT TCTAATCGAG TGAGAAAATG GTCAGTATTT
 CTGTCAACAA AATTCATGAG GCTCTTTGTA CGCACAGGAC TTCAGGCTT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT
 CCACAATGGA GGAACAACCT GGGGTTTTG AAAAAACAGG GAATGTTTCC AGAATINTTC TTCAAGAGTA TTTACATTTT
 T

SEQ ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCACGGGGA TTGTCCAAGG GTCTCCGGC GCCCAGGGCA GTGGTGGTGG CAGCACGAGT GCCCACTATG CAGTCAACAG
 CCAGTTCACN ATGGGCGGCC CCGCCATCTC CATGGCGTGG CCCATGTCCA TCCGACCAA CACCATGCAC TACGGGAGCT
 AGGGGCCCCN CCGCGNAAC TNACAGCACC AGGAAACCAA ATENATGTCC CTGCCCC

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

472

COGATGGTGA AGTGGTAAGA GGTCGATGGC CTGGGAGTTC ACTTTATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC
 TCCCAGNTTT ACACTGTAAA GTATAAAGAT GGAACAGAGC TTGANITGAA AGAGAATGAT ATTAAGNCTT TAACTTCCTT
 TAGGCAAAGG AAAGGTGGCT CAACTTCCAG TTCCCCTTCC AGACGCCGAG GGAGTCGATC AAGGTACGC TCCCGATCCC
 CCGGTGACCC ACCTAAAAGT GCGCGCGAT CTGCTTCTGC TTTCACCA GGGCGACATT AA

SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTGTACAA
 GACCTCACAG TCCTGGGTGG AGAGAGGCGG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC
 AGTCCCGACT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCTCAAC ACCAAGCTGT GGGCCAGAT GCAGATCGAC
 AAGGCCAGCG AGAAGGAGCA TTCGCATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCCTG ATCT

SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GGCGTGACAC ACGCGCCCGG CCTGTGGAG CATTTTAAAA TCTGATTCCT TTCCCCCTGA AGTTCCGTT CAACCTTNN
 CTGTGGTCAG GTTGATNCT TTAATTGCTA AAACAAGTCA AAATCAATA TCCATGGCAG CTGACAATTC AGACTTTGGC
 ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTGTGTINT TCACTTATTT ATAGTGCTAT GAAGCTGGTC
 ACCTGGGAGA ATGGCATAAC TG

SEQ ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCTTGCTCT GCTGCCAGG CTGGAGGGCA GTGTCTCGAT CTGACTCAC TGCAGCTGAT GCGCCCTGGG
 TTCAAGCGNT TTTCCACCT CAGCTCCAA GCAGCTGGGA TTCAAACAT GATCCACCAC GGCTGGGTAA TTTTGTGTC
 TTTAGTAGAG ACGGGGTTTT GCCAGTTGG CCA

SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGGCTGGAGT GCACTGGCGC AATCTTGGCT CGCTGCAAGA TCTGCTCCC AGGTTACAC CATTTCTCCG CCTCAGCCTC
 CCAAGTGGCT GGGACCACAG GCACCCACCA CGCTGGCTA ATTTTTTTTG TATTTTTAGT AGAGACGGG TTTACCATG
 TTAGCCAGGA TGGTCTCAAT CTCCTGACT TGTGATCCG CCGCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN
 CACTTGCGCC CGGCCCTCAC CTGTTAGTTT TTCAAGAGGT GTTCGTGATG TCCACTGTGA TAGTTATTTT GTGTGTCAA
 CTGACTGGGC CACGGGGTGC CC

SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

TTTTTATTGT AATGAAATTT TAAAAGGCAG TTACATTAGT TACACATATA CACAACCGAC TTAATAACTG TTAGTCATAG
 AGAACATTCA AGAAATACAA ATGATTTATC CACAGCACAG TTCACATCCA TAAGAAGAAA GAGAAATGGT TAAGTACTTA
 AACTGTCCAC TGACACCTGC TTATGAAATC TTTTCCTTTC TTCTTTTTT TAAAGGAAAC TGAGATTGTT AGATGAAGCA
 AGCCGTCCTG CTCCCGCACA GCCTGTGAAA CCTCCATTTT GCCACTTTCA AGGTCAGTGC CCCACAGACC CTGGGCTGTT
 GTTGACCATA AACTAGCTT TGG

SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGCTC CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGGCGGCTG CCACACGNTC
 CTCTAGGCCC TTCAGCGCA NAGCGNCTCC AGCACCTGT TGTGCTCCAT GTCCGTNAAC TGCTGCACGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)

473

CCGACTCTAC TGAAATACA AAATTAGCCG GGCCTGGTGA CGCATGCCTG TAATCCAGC TACTCGGGAG GCTGAGGCAG
 GAGAATTGCT TGAACCCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAACT
 CTGTCTCAA AAAAATAAAA AAAAGNTTAA ATGAGGTCAT GAGGGTGAGA CCTGATCCA AGCTCATAAG TGTCTTAGA
 NGTGTCTTA GAAGTGTCT TAGGACACTT CTTCTAAGT NTCCTAAGT GGGGAGCTTG CTCTCCCCAA

SEQ ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTCATTCTA TCTATGCCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC
 AGGNTCAAGT GATGGAATTC CCNCAGTTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGGCTGTTT GTCAGTGATT
 GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC
 CAAGGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTTGTCT ATATTCTCCA CCTCCCTTG GTTTCATTTC TCTTGGCTC CTGAATGAGA AGTGCCTGAG ATACCTTCAT
 TTCTCTGAA AGTATTGATC CAAGTTTAGA CAAATATCTC CCTCTTGTG GAGAGAATTC CTTATATGTG AAAATACCAA
 GACATTCTTG ATATTTAGCA GGCCTCAA TATTTGTCTC CTCTTTTTTA GCATAATTAA GCCAGACTGA TGTTTGCATT
 TGAGTATCAT CAGCATGAGT AACCNTTTTA ATCTCTCTC CCTTAACTAC TTGTTCTACA CTAGAGTCTA GGGTCAGGGT
 ACGTACAGTG AT

SEQ ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCTGACT TATGTGAGIN TCAGGCTTCA ATGCCTGINT TAGAGCTACT CCTTCACACA AAATAGTTCA GAACATAGAG
 AAGGACCAAG GTTAATAAAT GATTTTINATC CCAACACTA AACATGATTG ATGGGTAGAG GCTGCCCGAA GTACTGTGTA
 AAGATGGAAT CTGAGATAGA AGAATGCTGT GGTCAATTAG TAATCTTGC CCATGGAGGG ATTAGTGACA CATGCCTTGT
 ATATTTGTCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGT ATGATGTTTA
 GTAAAATTGA TTTTNCATA AAAGAAGTTT AAAATAAATT AGCTATTCA AGAGNATCAT GGTGTGCAGC AAATAGAAAT
 GTGTGCTTA ACTCAAATCA CAGTAATATT CTGTGGTAGT CAATTGATTT CTTTGAGCCN TTATTCTTTC ATCTGT

SEQ ID NO:2295: (Length of Sequence = 308 Nucleotides)

TTTTAATTTA ATCAGTAACT TTATTATAAC AAAACCTGTA TATTACCCAT TTAACTCAT GTGTAACATT CAGTGATGTG
 AGCTGTATTA AACCCAGGTA TTAGTGAAAA TTGCAATTGT AAAACCTGGT AACAGTAGAC ATCTATGGGT GGTCAAGTAAT
 TCAAGGACAC CTTTTATTTT AAACAATTTT ATATAATTCA TATCAATATG CAAAATTACC ATAAAAGATA CANGGATTAA
 TACATATTTA CATTTTTAGA AATAGTTACT CTGAGGTGTA CAGCTGTAC TTTTCTAAAT ATTTACAG

SEQ ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCTCCTG GAGGCTTTCC CCTCCCCAG GGCTTCCCTC AGGGCTACGG TGCCCCGCCA CAGTTCAGTT TTGGCTACGG
 GCCTCCACCT CCACCGCCAG ATCAGTTTGC CCTCCGGGG GTTCTCTCT CCACCAGCCA CTCCCGGGG AGCACCTCTG
 GCCTTCCAC CGCCTCCGTC TCAGGCTGCC CCGGACATGA GCAAGCCCC GANAGCTCAG CCAGANTTCC CCTATGGTCA
 GTATGCAGGT TACGGGCAGG ACTTGAGTGG CTTCCGACA

SEQ ID NO:2297: (Length of Sequence = 306 Nucleotides)

474

CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA
 ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGGN GCATGTACAA TTTNAAGCAA CAATTGAATA
 TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAACTA GCACTGTGCT CTTGGCTGAA AGAGAACGGG
 ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTACAC ATTGGGGAGA GAACCC

SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGTACACCTA GTATCTTTAC AGTGACTATT AAGTATTTTT GAAGTCAAAG TATATATTCA TCTTAAACTC CTGGAAGTAT
 GAACCCCTCCC ATGTAATTTN CTGATGAATG AAAAGGAAAA CTTTCTTTCA AATAAGTGTG ATCTGTGTGA AAAGTATGTG
 ATTTAAAAAC ACATGTAAAT ATAATCTTAG CTCTAATGTT TTCTTTGGG AGTTTGGGAA AAAGCAGTTA CATTTCTCTG
 TTGCTGTGTT TTTATCATTT GAAAATTGGA AGGATTCATT CTGGATTGCT GAGCTGCATC AGTAGGG

SEQ ID NO:2299: (Length of Sequence = 289

GTITTTAATG CATTTTTTTT AAAGATTAAA GTAAAATGTC TCAATTGTAA AAAATACACA CCGGGCAAAT CCTTACCTGG
 NTAAATAATA TCTACATCAC AGTACAATAA AATTNCTNCT CTATAAAATT TAAATATGGA TTATAGTCTA TCACTATCAA
 AAGAAACACT ATGCTAATAT TTCCATATTA TTTAAATAAC AGGAAAAATT ACGNGCTTAT TTTAGAACCT GATGCCATAG
 CCGTTGGAAA GGGCAAAGAG ATTCAAATGT CGATCATCAC TCTCCATTT

SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG
 CCTCTTAGAT ACCAGCAGCG TCTCAGAAC CCACGTGTCC TTTGTCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG
 CTGTNATCGN GGAGGTCCGG ATGGAAAACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA
 GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA
 GAGTTTATTC ACGGTTTCTA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

SEQ ID NO:2301: (Length of Sequence = 287 Nucleotides)

ACTTGGTGTG GGGATTTGTT GTGAGGTTTG CTGACACCTT GACCATTTTT CACTGGCTGG AAATGAAAGG AACTTCCCAC
 TTGCTCTTTG AAGGCAATTC CATCTCTTCC AGGGTCTCTA TTTCTTCCC ATATTCTCTC AACTTCCCAC AACTTCTGAAG
 AAGGGAGCAA ACTTTGGCCA CGAGGAAGGA GTNGAGCTGC CTCTGTACTT GTCAGTGCAC CTGCACTGGT TGAATCCACC
 TTTCTGGGT CACGCGCTG TGCTGGGTGG TCACAGCCTA GGACCCC

SEQ ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAAACTT GTCGGGGAAC TCGGAGAGAA GATCATCGTT GGCGCGGTCC TTGGTGGGCC CAAGGATGAT
 GATGGGGCGA GCATAGTGCA CTTCCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTCGAACC TCGGATCCAG
 AGCTGGAGCC CCACTCTTTG GCCTTTAACC TTGACCACTC TCGTCTCTCA ACCCGCGTT TGCTGGGGAT GAACCCAATG
 TCGTGGGTCT CACTGTCTGA GTGGACCCGC CGTGNCTGCC ACCACTCCTC ATCACTAGCA TCGATGACAT GCAGCACATN
 CCCAAGCGG AAGTTCAAGG GCCTGGCTCA GGAAGCCG

SEQ ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGGCT CCAGATCATC CTCTCCAAG GGCCCCGAG GCGCCTCCTT GGCCTCTGGC TCCTGCTTGC CGCTGGCCTC
 CAAGATGGTC ATGATGGAGT TAGGGATGTN AGCTTGCTGG TGGGGGTGA AGGAGCGGAC ATGGGCCAGC AGGGGCTCCC
 GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG
 TGCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGGG GTACTTCCAC AACTGCTTCA TGATGAGGCG GGACAGGATG

475

TTCATGACGG AAGCCCCCCA GCGGGGGTGA CATGGTCANG GACCTGGATG ACGGTCTCTA TGAGCAACAT GGGCAAGGGG
GCT

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCTTGCTAT GTTGCCAGG CTGGTCTTGA ACTCCTATTC TCAAGAGAGC CTCCTGCCTC AGCCTTGTAAG AGCACTGGGA
TTATAGGCAT GAACCACCGC ACCCAGCCAA GATTGCCATT TTGTATGATG AGACTGGAAG GACCCCATTTG TTTCAGGATT
TTGCTACAAT ATACAAAAA CAATCTGTGA GACAGTGGCT GGGCTTTTTT CCTGCCTGAT TAGTTTCAGTG CACATACAAC
TTGGACCAGA GGATCTGGGT TTGAATCCCA TCTCTGATAC TTCCCAAAT GAGCTGTTTT CCTTATTTGT AAAGACTAAG
ATCGCGTATG TCAAGAGCT CTGTAACTC TCAACACATA CAAAGTACTA CTGCTG

SEQ ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGCC TGCTCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCCTC
TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCTACG TAGAAAGGCC CCGGGGCTTT ATTTTAGTCT CCTTTTCAGG
GATGTCGTGG GCGGGGGAGG GGGTCTTGG TGCTACAGCC CTCTCCCCAC CCTTAAAGGG ACGCCGACGC TGTTTGCTGC
CTTCACCACA TATTAGTGCT TGACCCTGGC AGGGGACCCC ATGGAAAAGA TGGGGAAGAG CAAAATACAT GGAGACGACG
CACCTTCAG GGATGCTCGC TTGGGATTCC CACG

SEQ ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCCT AAGTAATTCC AAATGCCTTA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA
CAAAGGGAGT AATCAAGTAA ATACCTGTCC TCTTTCAATG GACTGTGTC TATTGAGCAT TGTGGATGAT GTGTTTTCAG
ATTTCCAGGT GAAGTCTGA CCTACCTGT TTGGCCAAAG ACGTAAATTG AGAGGAAAGG CCTTGGTCTT CTGATCAAC
CAGCATTTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTTG
GATGCCTTTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAC CTGGTAGAAC TGCATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA
AATTCAACGC CCTCTATCG AAAATGGACA GATCCAGCAG GCAGAAAATT AGTAAGGACA TTGTTGAGCT CTGCAATACC
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACAACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA
ACATTCAAA AGATAGACCA CACGAGGCC CATAAGCAC ACCTTAACAA ATTTAAAATA ATATAATCA TACAGTGTGC
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CTTTTTCTG AGAAGCATGC TTAGGTGTG GGACAGGAAG TGGTAAAGGC AATGCATCGT CCACAGAGGT
GGATGAAGCA GTNACAAAGG AATGATAATT TNANCTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT
TACTCTCCAT CATCCTGGTG GGGGGCAGTN GTGCAGGAAA GCCACAGGGA TTCGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGGCTATGA AAATACAAA AACATTAGCA CATTCAATG ATGTATGTGT CTACAGGCAT TTNCCCAGCC CTATGAGAGT
NCTGCAATTT GAGAAGTACT AAAATGTATT GTTTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGTTG
TGGCAAAGCA GTCTATTTCC ACTGCAATTT CTGCTACTAT TAGCTTAAA ATTGCTGAGA CAAAGGACAA CCTTCTGATT
ATNCTGCTGA GATCTAATGC AAAGTCCTCT CAGANGCTTC ACTACACAT

476

SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTGNGGGCTG CCTCTCGTTG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG
 CTTCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA
 TGTCACTCT GGTGCTTGAA GGCCTTTCTC CAGGGAGACA AAAAGTTTGT NTTGGCTAAA GCTCCCTGGT TGCTCAGGAG
 CCAAGGTCA CATAATGTGC CAATGGGGT TTTTGCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNNACATCC
 CTTTCTCTC TCTTCTCTG CCCACCTTC ATGCCAAG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGGCC GGCTGGGCA ACATAGACAC CATCTCTTTA AACAAACAAA CATCATTAGT TTCTACATTC TACAAGGTGA
 AAGACTAAT AGAAGTGAAG AATACCACTG AATGTGTGT GTACAAATGG CAGCTAATT TGATTACAC TAGATTTTAC
 ACATTTGTGT CTATTTCAA TAGGTACTTT TACATTTTCC TTAAGTGCAT CTGACACAGA GTGAATCACA GATATATGTT
 GGTGTCGAAA GCAGAGGTTA CTATTATTAA NCGAAAATTT TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTACAGAT
 TGTG

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAGTTTATA AAGCTTTTAT AAACATTTCA AACAGCTGTG CAACGAACAC ACCAAATAAA AGCTCTAGAA TAGCAGTCCA
 GACGTTTCAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTNCCTG NCTCTGCCCT GCCCATCTCT
 CTTTCCCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG
 AGAAAGTCTC GTTGGCCAAC ACTTGTTACT GAAGCGCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CCTGGGGTAT
 TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEQ ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTT AAATTAAGAC TGCCTTAGTG AGAAATTTT AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA
 GAAGTAATGA CATAGGCAA TTGTCAAAGG AGAGGTTCCT TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNCTGAAC
 CCAGCACACA GTTCACTTAT GGTGGTTTTG AAATCTGCCC TGAATTTTNC ATGCATCTTT TAAATTTTGT GTTATTTTTT
 NCAAGAAATA AATGAAGTCT TTATTTTINC AATGAGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGTT
 GGTTCCTAAT CTGTTTCAT CTCCCCACT GATCTTGAGT TTTAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC
 ACTGTCAGAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEQ ID NO:2314: (Length of Sequence = 316 Nucleotides)

CGAGGCAAAC ACAAGGGCT CTTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCCCT ATGGCCTCCT
 TCATGACGCT CACGAGCTGC ACCTTCTGTG GTCCTTAAG CAGTGACTGC TCACAGCGAG TGCAATCCTG GNTCCCCAAC
 TCCATGAGGG CATAGCAGGC GGTCAACACA TCCTCTTTCA CCTCGTGCC CGTNCCTCC AGTGCCAGCC GCACCTCCAC
 GNACGNCAGA TTCACCAGA GGGCCAGGAA CTGTCTCCC GAGCTGCCC CCGGGATCCA GTCGGAGCCG CAGGTG

SEQ ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTTTTATGT GTAGACAGGC TGTGGGTTC CTCACCTTAA ATTGAAGCTC TGTGAACCT GAGACACTTA AGANTCTTGC
 AAGTNTGAAA AGTGGAGTGA AACAAAACCA TTTCTAAAC GAAATGTGT AACTNCNTT AGTTTTACAC AGTGNAGAAA
 TAAGTATTAA ACAAGTAGT CTCAAACGGT TATATCTTAA GTTCATTTTA TTCTGTAT CATTAAGTAG ACATATCTTG
 GTTTAGAGAG CAGCACACAA GACATTGTGT ACTNTTAAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)

477

AATCATAGCT TACTGTGGCC TCGATGTCCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG
 GTGCGTGCCA CCACACCCTG CTAATTINAT GTTTTGAAGA GACCGGGTCT CACTTTGTG CCCAGGCTGG TGTCAGACTC
 CTGGGCTCAA GCTAAATCAC CCACCTTGGC TTCCCAAAGT GTGGGGAATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT
 TTTTGTATTT CTACTTAAAG GCGACATACT TAGTAGCTGT GCGTCTTGGG GCAGATACCT CCCAAAGCCC CAGTTCGTG
 ATCTATAAAT AATGTAACAA CAGGGCCCCG CTCGCAGGGT TGCTGTGTGC ACATATGTTG GTGTACGTAC CCATGTGCCT
 NTACGAGAAG GGCT

SEQ ID NO:2317: (Length of Sequence = 166 Nucleotides)

GCAGTACTA TTATTAACAT TACAGTACCA AGCATCCGCA AGAGACAGTC ATTTGINATT TTTNATCAAG AAATAGGGCT
 GTTTTATACT GTTATTGACA TCAACTTTTT CCCAGTGCAT TTTTCAAAA TATTAATAAG TTCAATCCCT TGTCCTTTTA
 ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TTTATTTTAC ACTTACAAAA GAAATCGCCC ACCCCTTTGC CCCATTCCCC CAAACAGTC TCTTTTTACA AACATTTAAA
 AATTAAAACC AAATGAAGAT AGACAAGTTA ATTTCACTAC AATTATTTIN CAGTGTAGCT GTCATAATTA GAGTTTAAAT
 TTCTTACAAG TGACCAATGT CCAAGTGAAT TATAGGAAA TCCTGATTAT CGGCCAAAGG AAATTCAATA TTACAAGTTA
 GCAAATTCIT AGTACAAAA TAGTCCGTGT GTTGGAA⁷⁴³ CTTTTCCTTG TTACATAGGT CTTAGGTCAG TCTGCTGTA
 ATACCTTAAC GNTTCCGGAT TCINNTCTCA CAAATG : AATCGTCACT GCTG

SEQ ID NO:2319: (Length of Sequence = 180 Nucleotides)

CATCTTAGIT CATGGTAATC TCCTTGGCAG CACTTATTGT CTTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGTT
 AATTAAAGAG ATCTGCATTG CAAACTGGT CACTAAATTG CTCGCCAAT TTGAGGCTTT TTCTCTGCCA ACACAAATTA
 ATTTTTTAAG TAGCAGCATT TTCAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC
 AAACATCAA CTTTAAACAT ACCTTTGCCT TTNATAGTAG TTCTTCACAC AACTGCCTT AATCAAAATG CGTGTCTCTT
 GCTCTGTCTAT TTTATGTTTT GGCTCTTTAG CAACCTAATT GTATGGTTAG ACAGATTCCT

SEQ ID NO:2320: (Length of Sequence = 348 Nucleotides)

GGAGTTCTCT TGTCCACGGA GAGCAGTGTG CAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
 TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTTGG TTGGCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
 AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAAACATGT CCAAATCCT AAAAGCACGA
 TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTNATA GGGGGTACT ATGAAGTTAC TTCTCCAAC ATTAGTGCAA
 ACACAAAGTA NGAAGGTGGT GCCACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TNAGTTCCCT GCATCTGCCA CGTAGTTTC TAGCAGGAGT AGTGGGGGGA GTAATACAGA TTCTNCCCTA
 GAAGGGGACA CTGGTAACAT GTCCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTNCTNT CTTTGTGCCA
 CCCCCCTGGC ATTCAGCTGG ACCCACTAG GCCATCATGA GTGGCTTCTC CCGTCATCC CCAGGGGTCA TAGGATATCT
 ACACCGCCTT TINTGACCCA CCCTGCACTC CCATCCTTTC CTCTCTCCCC GGTTCATGCC CTGCACTACA TAGCACAGCC
 GGGATGCTTN

SEQ ID NO:2322: (Length of Sequence = 352 Nucleotides)

478

TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG
 TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCTTATGTG TGTGGGAGAG ATCCTGAAAA TCAACTCTGA
 GCACATTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTGA ATCAGATTGC CTACCTTGGT TAAAGTGCAG
 ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAAATAAAT GTATATAGTT ATTTTGTCTA
 ACCTAANGAA CCTACTCATA AATGGGCTAG TG

SEQ ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CTCTCTCTGT CGCCCGGGCT GGAGTGCAGT GGCACAACTC AGCTCACTGC AACCTCCGCC TCCCAGATGT
 CCAAGTGATC AAGGGGTTC ATTTGCTCTT GGGGATTAG GTATCATTTG GGGAGGAAGC ATGTGTCTG TGAGGTGTGT
 CGGCTATGTC CAAGTGTCTT TACTAATAG TGGAGACGGG GTTTCACCAT GTTGGCCAGG CAGGACCTCA GGTGATCTGC
 CCACCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGCTTCATT TATTTTCTTA TCCATG

SEQ ID NO:2324: (Length of Sequence = 300 Nucleotides)

GGGGACAGGA GGTGACCTCG CGAGCAGCG CGCGNCCAN ACAAGCAAGC CGCCCCGGC CTCTCGGGAG CCGTGGGGCA
 GAGGCTGCGG ANCCAGGAG GGCCGGAGCC CTCATGANIT CANINACCTG CTCTCCCCC TTAGGTCTA TCAGCCACAG
 TTTCTGCAAG TTTCCAAGAG CAGCAGAAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC
 ACCCAGGNGG AGTGGCAGCA ACTGGACCTT GATGAGAAGA TAGCATACGG GGATGTGATG

SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAAA TAATAATGAT AATATTINCT TATGCTTACT TTACTGTAAG ATTACAGTAT ACATTACAAC ATATGCGTTT
 ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAAITAAAT TTTTGAGGAG TCAAAAGTTA
 TGTGTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTGTTTC AGGGGTCAAC TGTGTATTCT TTCTGTGGNA
 ACATTTTITAG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTTAGTTG AACTCGNGTG TTC

SEQ ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTGTGCTCG TGTGGCAGAT GACACAATCT CTCCCGTCCC TGGAGGCCAG CTCCCCCGTG GCCAACCTCA GGCTCCCAT
 GGCATCTCAG GGCTCTCCA GCCAGACTGG CGCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGCT CTGTGCCAGC
 CCTGCGAGGA GGCAGATCAT GTTGTCCAGG CCCAGAGGT AGCCGTCTC ACGGTTGCCN TCAGCCAGG GCAGCCTGTG
 GCTGAGCGTC TGGTGGTCGG GCAAGGCCAC CGTCTTGGCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGTCGT
 GCACGAAGAG GAGGGAGCTT CCTACCAC

SEQ ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCTGTTTTT TCCTAGCTGC CAAGACTGTT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTTT
 CTGTGGATGT TCCTCATCTG AAATTTTGAG AATGGAGAGA ATTATTCTGG ATAAGTGA TGGGATCTT CACACAGCCA
 CACCATTGGA TTTCTTCAT ATTTTCCATG CCATTGCACT GTCAACTAGG CCTCAGTTAC TTTTCAGTTT GCCCAAATTG
 AGCCCATCTC AACATTTGGC AGTCTTACC ANGCAACTAC TTCATGTAT GGCTGCAAC CAATTCTGC AATTCAGAGG
 ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATGGAG GAAACTCATT CCTGATTGGC TTTCTCTTAC AA

SEQ ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGT GGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTNCTTTTC TGTGGGAAA
 AAAAAAAG AAATCTCCA AACACACCG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA

GGCCTTTTAA TGCCATAGCT AGTGATGATT CANTCAAAGC ATCAGTCTAA GGAAGGATGA TGGGGGAAGG GACCNAGAT
CACAGNCCTT CTCCTT

SEQ ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTTCATT ATGTTGGCCA GGCTGGTCTC GAACTCCTCA CCTCAAGTGA TCTGCCTGCC TGGCCTCCC
AAAGTGGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTTT TTTTTTTTAA CGAAGTTATT TTTCTAGAGC
ATTCATAGTT TGTTTTATA CAGTTAAGGT TCTCATCCAT CTGGATTTTT TGGTAAAGTGT GGGGAGAATA AAATGAGGAG
CCNCTGTTTT TTTCTCCAAA TGGCATGTAT TGTCCCAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT
TAAACTATTG AACTTTCACA TCAAAATTTT GGAACITACAA AGTAGGTTTA ACAAGGTGAG AAC

SEQ ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNTC TCAACCTATT CTCAAACCTT AAATGGGTAA GAAGCCCACT GGTCAGCATG GCAAAGCCCC AGCTCTAATA
AAAAATGCAA AAAATTGGCT GGGAGTGGAG GCGGGCGCCT GTAATCCCAG CTACTTGGAA GGTGTAGCTG GGAGAGTTGC
TTGAGTCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT
CTCAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAAC
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCAGTG GCTCAAAGGA GGAAATGACT GG

SEQ ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCTT GTCACAGTC CTTTCTGGAA GAGTTTAGAA AGCAAAGAAT TCACGACTC AGCAGGAAGC
AGAACGAGCT GTTCCTTCTT TTGACACGCA CAAGCTAATC CCCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAAATTAAT
TCTTTGGTCA CTGGTTCACT GCTGAATAGC CTGGTTCAGT TTTGGCTCTC TCCTATTTTA GGGGGAAAAA TATTTTNGTT
TCITTTTTTTT AAAAAATAAA ATGTTGCGAC AATGGGAGAA AATT

SEQ ID NO:2332: (Length of Sequence = 349 Nucleotides)

ATCTTAAAAA GATTTTTTGT ATTINCITTT GAGACTGGGT CTCAGTCTGT TGCCAGGCT GGAGTGTAGC AGCCTGATCA
TGGCTCAGTG CAGCCTCTAC CTCCCCGGGC TCAGGTGATC CTCCCCCTTC AGCCTCCTGA GTAGCTGGGA CTACAGAGGT
GTGGCACCAT GCGCGCTTAA TTTTGTATT TTTTGTGAG ATGGGGTTTT GCCATGTTGC CCAGGCTAGT CTGAACTCC
TGGATGTGAG CCACTGCGTC TGGCCTATTA TTTTAAATAT AGTTCTCTTT ACTGCCAGTA GCTTTCATAT AACCCTAGCG
ACTAGATTTA GTCACCACTG CTTAATTCC

SEQ ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCTCTCC GTTCTCTGCT TCINAACCAC AGCGCATCC TATTTGCAGC CCTCAAGATT AAGGATGAAA ATTTGACTTT
TTAATTTTAT TATTCCTGTT CTTCCTTCTT ACTTCATTAG AATCATGTTA TTGGCCTAAA ATACTGTATG TAAAGGATGC
TCTGGGGCCC ATCTGGAAGC CTGCATCTC TGGGGATATA ATTACGCTAA GCAATTTTTT ACCAGGGACA GCATGACTTA
GCTTCTACCT GGGCATCTC TGGCAACACA GCGCTCAGTT CTTCCAAAGG GATTGGCTGC TGTCCCTTCA GGCCTTCTTC
TTNGTGTGT GTGTGTGTGT GTGTGTGTGA TTC

SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GCGCCTCTTA CNAGCTGCTG CTGCGCNCCT CATNCTGGTG GCGATGCTGC AGCTGCTCTA CCTGTGCTG CTGTCCGGAC
TGCACGGGCA GGAGGAGCAA GACCAATATT TTAAGTTCTT TCCCCGCTC CCACGGTCCG TGGACCAGGT CAAGGCGCAG
TCCGACCGC GCTGGCCTCT GGAGCGCTC TNGACGCTAG CCGCGATTAC CGCNTCTACA GGGGCTGCT GAAGACCACC
AINGACCCCA ACNATGTGAT CCTGGCCAAG NACGCCAGC

480

SEQ ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCAG
 GGAGGTGTTA GCCATGCCTG TTTCTTTTAT TGGAAAAGCT TTCCAGAAAG CCCAGGTAGA CTTCCTCTTC AATTTCATTG
 GCCACACCTG ATCAGATAGC CATCCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTACAGC CTCCACAGTT
 GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCTGAAAA GTGAACCAAG GTCGTCTGCA CGCTGCCTT GGAGGGCGTG
 GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTGTC TCCATGGAGC ACCTCT

SEQ ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCTGGA GGGGCCAGCC TGTGGTGTCT CTGGGCTTG CAGCTNTTTC TNTAGGGTTA
 GCGGTGGTGC CGGGTCACT TTCTGAATCT TTTTTTTTTT TTTTCAAAAA GGAAAGTTTT TAATGGAAAG TTGAGCCAGA
 ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGTGGGGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC
 AGTGAGGAAC GGTGCCGG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTTC CCACITCATA AAAGCAAAAT ATGTAAGACT AGCATCTGGT TTTTGTCCCA ATAAAAAAT CCCACAACCT
 TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TTAAAAATCT ATAGCCCAAA
 TCACCAAAAG GTAAGGAAAG AACITTCCTA GCAAGCTCTG GAGAAGACCT AATTTGNGCA TCAAAATGGA GCTTTCAGAC
 ACTAATCAAG GCCATTAATT AAAAAAATTT TTTCAGGAAA ATAAGGCAGG TTGGATCTCT TTTCCCACTT CATAAAGCA
 AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GGGTCTTGCT ATGCTGCCTA GGCTGGTCTT GAACTCTTCA ACTGCAGTCT TGACCTCCCA GGCTCAAGTG ATCTTCTTAC
 ATAGGCCTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTCTTAATTC AGCTCACAAT
 GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACCT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTTCTTA
 GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAAAGGCC ACATGTGTGC CAGAGTGGCC AGGGCAGGGA
 GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTTGTGT TATGGGTTTC TTTTGAGGGA
 AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGCTGGAG GAAGAGCGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGCGT
 TTNTTGAGAC ATCAGTATAA CGCTCACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCGGNT
 CCTGCAGGCC CTCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG
 CCTGNTGAA GCAGGCCAAT NAGGNGCAGC TTCAGCTGGA GCGGGCGCGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA
 GGAGGGCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTTAGTAGA GATGGGGTT TCTCTTGT GTTCAGGCTG GTCTGAACT CCGACCTCA GGTGATCCAC CTGCCTCGGC
 CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNGCGNC CGGCTTCAG TTTCTTCTTA GGCGTTCTG TCACCCAAAT
 AGCTGCTACC CAGAGNGCG GGGTGTACCT AGGCTGAATA TCCACTTTGT TTTTATGGAT GGCTNCCCTC CCCCATTGCG
 CTTTNCAGA ATATCCTTTC AAGTNCANT TTCCAGGGG AGCTCTTGGG

SEQ ID NO:2341: (Length of Sequence = 298 Nucleotides)

481

TTTGTCTTAT TACCCGATTT ATTAGAGAGA TCTCTAAAAA GACGGGGTGT GCGGGGGTA GGTGGGCGAG GAACCTGGGA
 TGCAAACAG TGTGTGGGGC CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTGTGAGGG ACACAGCACC
 CTGCTCTGG CGCTTTGGAT TATCAGCAC CAGACCACGG GCGGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC
 ACACGAGGTT TGCAGTTTCA TTTTGTTC AATCAGTTT GGCCATAAAA ATGGGACT

SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTGAACAAG GTCGTGGTGG TGTGGAATTC TCCCAAGCTG CCATCAGAGG ACCTTCTGTG GCCTGACATT GGCGTCCCA
 TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACCG ATTCTTACCC TGGAAATGAAA TTGAGACAGA GGCCATCCTG
 TCCATTGATG ACGATGCTCA CCTCCGCCAT GACGAAATCA TGTTTGGGTT CCGGGTGTGG AGAGAAGCTC GGGACNCAT
 CGTGGGCTTC CCTGGNCGTT ACCACGCATG GGACATCCCC CATCAGTCTT GGNCTACAA CTCCAACCTAC TCCTGT

SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGGAG GAAGGTTGGA CCTTCATCAG ACCACTCCCT TCCCCATCC TCCAGGAGAG GGGCAAGGG CAACCCACCA
 TCTACCCACT TACTAACCTG GTCCIAACCC CTTTACTGTG CGCGTGTGTG TCGTGTGCG CACGCTCTGG CTGTTTGTCT
 ATATGTCTAG CTCATCTAGT TCCTCTTCTT AAGGGATGG GGGTCAGGGG CTAGGGGAGG GGGCTGAGTT TCCCCACTTT
 AGGAGGAGGT GGGGGCTATT TCTATGCAAA TAGAAATCAG CACATTCTCT CTACTTCCCT TTCTTCCACT CCCCCATAT
 CTTTAAAGTG TGAAGCAGA AAAGGACCTG CATTTTCTCT ACAATTGAGG AGCTGACATA

SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GGGAATATAT TTATGCAAT TTTATTGAAA TTTATTGTAA ATAAAGNITT TCNCAGTGGN CTAGAAAANC AGCTTGAATG
 NCATTGACA TTTATTGAAG AAGGATGACA TCCCTNCCAC TTATTGCACA AACTTGGTAG CTTTGAGACA AATACAGTAG
 CACAGTCCGT TTGAAGATTT GTCCAAAAA TTAGTCCATA TTTTAGTGGC TCAGTGTCAA GNGTTCCCTC CCGTGCCCC
 CACTGTGCT TCTGCAGTA TACGAAGGAT GAATGCTTAA TT

SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTTTATAGGA AGCTGCAAAA GAAATGAGCA GAGCGNGATA TTTGTGGTAA GGGATACAAA GAACATACAA TGTGTACTT
 GAGAGGTTTC ATGGAACATT ATGACCCATC CAATGNAGAC ATCAACATT AACAACAAAA TTANTTGAGG AAGAGCAGTA
 TGAAAATATT CTAATGAGT GCTGTCCAAC AGAAGTTTCT GTGGTGATGG AAATGTTCCA TATCTTTGTG CTAATACAGA
 ATCTACCAGC CACATG

SEQ ID NO:2346: (Length of Sequence = 437 Nucleotides)

GTGGAGATTG ATGCTTCINT TTTTGTGTG CGCTGCTGCC CTGCGCTGG GAGCCGAGCC GGAGGGAAGG CGGTGGAGAG
 ATGATTGCAG AGTTGGTGAG CAGCGCTCTG GGGCTGGCCT TGTATCTCAA CACCCTGAGT GCGGATTTCT GCTATGATGA
 CAGCGTGCT ATCAAGACTA ATCAGGACCT TCTCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA
 CTCTTCTAAC CCACAGTGGC AGCCACAAGT CCTACGGGCC ACTCTGCACT CTTTCTTTT GCTGAACCA TGCCATTGGA
 GGGTTGAATC CCGGGAGCT ACCATCTTGT CAATGTCTG TTGCAATGCA GCAGTCACTG GTCTCTTCAC AAAGCTTCIN
 CAAGATCCTC CTTTGGTGAT TGGATACTGG ACATTC

SEQ ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCCGGCCGCC GCTTTCGCC GGGGCGAGAC CCCAGGTTT AAAATGAGCC TGTTTGGAAC AACCTCAGGT TTTGGAACCA
 GTGGGACCAG CATGTTGGC AGTGCAACTA CAGACAATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCCTGAT
 GATAGCATTG GTTGTCTGTC TTTTAGCCCA CCAACCTTGC CGGGGAACCT TTTTATTGCA GGATCATGGG CTAATGATGT

482

TOGCTGCTGG GAAGTTCAAG ACAGTGGACA GACCATTTCCA AAAGCCCAGC AGATGCACAC TGGGCTGTG CTTGATGTCT
GCTGGAGTTA CGATGGGAGC AAAGTGTITA CGGCATCGTG TGATAAACT GCCAAAATGT GGGGACCTCA GCAGTAACCA
AGCGAT

SEQ ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCG ANITCGCGA CCGCTGTAA GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC
CGGTGATCAT CGAGGCTAC AAGGGTGAGA AGCAGCTGCC CGTCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCGTCTGC AGCTGAACCC CACGCAGGCC TTCTTCTGCG TGGTGAACCA
GCACAGCATG GTGAGTNTNT CCACGCCCAT CGCGGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG
TCTACGGCTC CCAGGAAACC TTOGGCTTTC TGAGNCAGCA GTA

SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCTCTCTACT GATGTCTTTC AGTAGATTC GAAGTGATTG TGGCAAACAT AGTATCTTGA AGGAAGAGAT CGTGTTTTGA
TTAGCATCTC CCGAGCCTAG TTTTGTGTTT ATGTTTCATGG TATTGAGGAA ATAAAGATCA ATTTGGACTT CTTGCACCTG
TTAATACATC CTAGTCTCTG ACTGCAGCAA AATGACTCTC AGTGCCCCCT TCTCTTCTTA GTGATTGCCT AAGATGACAG
CTTCATCTCC TTTTAATTAT TATCCACCTT CTTCCTCCATC TTCANTTGT TTTCAAGTG AGGGACTTGG CCTCTACTGG
GACTCCACTG GG

SEQ ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT
CAAGCAATTC TCCTGCCTCA GCCTCCGAG TAGCTGAGAC TACAGGGGTG TGCCACCATG ACCGGCCAAT TTTTGTACT
TTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCGAACTCC CGACCTCATG ATCCACCTGN CTCGGCCTCC
CAAAGTCCCG GGACCACAGS CATGAGNCAC CGCACCAGA AAAAGCAAAT CTCTTAGTAT TTTTCTCTT GTCCAAAAGG
TTCTGACCAT GTTCATGAC

SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTTGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CTTGAAGATT TCTCAACTAA GAGTCTGCAC
CCATGACAGC CCACCGAGAC CTTGCTCCA AGTTTGTGGA GAAAGGGAAC CCGCTTGGCA GCATGTGGAA AGACCCACG
ATGAGCAGCA GACACAGCAA CGTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC
TGTATGAGAC AGCAACAGCC AGAACAGACA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA
GGGACGCCG CAGTTCCCAA AATCACCTCT GGCC

SEQ ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTGTGTTGTT TAGTGAACA CTCAAATCAA AAACAGGCTC ACGTCTGAA TAGTCTCTG GTCTAAGCAA CTCAGCACCA
GCGCGCCAA GGGAGGCGG CCTTGTCTT GGGCCGGGA AGAGACGAG CTCCAGCCCC GACGCAGACC CCATGGCGCA
CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTGCG GGGAGTGGC TGGGGAGGG TCCCTNGCTG AGGCTGCACC
AAGGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGN GAGCTTGGGA TGGGAGCGT GAGGTGGGA TGGTTTNGCA
GAGGGGCAGA GCCAAGNCA GAGGCAAGTT CTNGGSCCC ACAAGCTTAT GGTGCGCA

SEQ ID NO:2353: (Length of Sequence = 369 Nucleotides)

CTGCCTTATA TAATGTGGAT GCTGGGCACA GAGCTGTCT CTTTGACCGA TTCCGTGGAG TGCAGGACAT TGTGGTAGGG
GAAGGGACTC ATTTTCTCAT CCGTGGGTG CAGAAACCAA TTATCTTTGA CTGCGTCTT CGACCACGTA ATGTGCCAT

483

CATCATTTGGT AGCAAAGATT TACAGAATGT CAACATCACA CTGCGCATCC TCTTCGGGCC TGTCGCCAGC CAGCTTCCTC
GCATCTTCAC CAGCATCCGA GAGGACTATG ATGAGCGTGT GCTGCCGTCC ATCACAACCTG AGATCCTCAA GTCAGTGGTG
GCTCGCTTTC ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEQ ID NO:2354: (Length of Sequence = 363 Nucleotides)

GGAGAGGGAT TGGCATGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAAACCATT
CCTGCTCCTG GATACTGGAA GACATTCTGC TGCATCTINAG GATTGATTCC AGTGCCAAAC TGTCCTCCTA TGTTTCCTGT
CATGCCCTCG CTCACCATGC TGTTCGGGTT GGCCAAGGAT GCTTCAGGAT TINCTGCTAG TTGTGAAAAC GGGCTGGTAG
AAGCAGGTGG GGTTCCTGGG ATTGTACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCCTGAG GAAGACGGGG
GTINCCCAT TNAATGGTA GTCCAGATGA GGGAGGGAGG GTT

SEQ ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGGCCTC CTCATGTCTG AGGTAGAGTA AGACGGTGTG AGGGGGCGGA CCGGGGGGCG GAGATGAGCA
CCGGCCGCAC TGGGGCATCA TCNGGCCCA CCGGGGACGA TGGGCCGTGG GAGGGCTCAG GGCGGTGTGG TGGCCACACT
GCGAAGAATG GATTMTTAAA ACACCTTCATA GCCCCGANIT TMTTCAGCT CCTCTTCGT GGACACAACT TCAGGGCTCC
CTGTGACTG GCTTTCGGGG GTGGTCTCCC CACTTGCGA GTCTGGTCTC CACAGGACAC CGTCTTCCC TTCCCTTCCA
AGGGGCAGGN CCCACGNACC CTCGCCCAA AANTAAAGGA GCTTTGTGTT TGAAAACGCC AAGGCAAGCC GTCCAAGGGA
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACACGTGTAC CTGAGCCTG AGAAGCCAAT TCAGATTCAA CCTGAATTT
GGTIGATTTG GATTAAGTGA CGCAAAAAGT CAATAGAACC ATTGANITTC AGAAATCATA AAGTGCACAT ATGCCAAAGA
AAAGAGTACA TGTGAATCAA CGGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANIT CACATAATTT TMTTGCCTCC
GACAAAACAT TTAAGCAGTT AATTTTGTIT TGTITTTGTT TGTITTTGTT TGAAGAACAN TTGTGGTCTT TTACATTTTC
TTGGTGGGAG AGCAAATTCT GATCAGCATT AGTGTGTGA AATACTTTTG GNTTATCATC CCCCAGTNT AGGGTGAGAT
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTINGTT CACTNAAANT GCTTGG

SEQ ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCCATG CCCAACAAGC CATATTGTCA ATAAATAAGG AATAACTGAA ACCAGACCCT TTAGGAAGAG ACAGAAATTC
CATTACCCAG GAAACCACTC AGTGAAGATG CTGATAGTTC TGATATGTTT TTATGCCCTG CCCCCTTCCC CAAAAAACC
ACCTGCAGAA CCAAATGTTT CTCCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC
TTCTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCACAA ATCCAGGGAG
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTT AAAAAGGNTA ATAAAGGTGC TCGTACTTGT
ATCTTCTTCC CT

SEQ ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGGCAGC AGGTTCAAGT GGGGCCCTT GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT
GGCGATGCCA ATGCCGCTGG TGCTTATAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT
CCCCCCCCAG GAAATTGCCC CAGATGCCCT CTTTCATGAT GACGAAGCAT TTAAGCGGCT GCAGGGCAAG AGGAACCGAG
GGAGAGAAGA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTCAGT GGGGCCAGC AATGGATGAC TAAGTCATTG
ACAGAAGAGA AAACCATGAA GTCAATCAGC AAAAAGAAAG GTGAGCAGCC AACAGGCCAG CAGCGGGGGG AAACACCG

484

SEQ ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA
 GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT
 TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC
 AGGGGGGCAG CCCAGTGGAA TGGAAAGAAT GTGGGATTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC
 ATTAGCTGTG TGAATCTGGG TGAGTCCCTT AA

SEQ ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTTCAG CATAGTCAAT TTAGCTTTAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCTNCTAAAT GAACGGCTGA
 TTTTCTGCC AAACATAGCA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCCTACAG GACACTAAGG
 GTTCTTACAG ATAAAGGGAC GATGCATCA TGCCGAGAGA ACTAATCACA CCTGATTTCT CTGGGATCTA AANTAATGTC
 AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTTNTT TTINTGCAAA CCNCTTTCAA GANCAATGCT GCCCATCCCA
 TGCAAGATGT TGTGTAAAG CCANCTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCCTGT
 GTATGGCCTG GCAACTAAAA AATGTTTTT ACATTTTAA ATGGTTAACA AAATTAAAT AAGAGAATAT TTCATGACAT
 CATCAAATTA CACGAAATGC AAATTTGAGC ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCTCAT CCGTTTGACG
 GCIATCCCTG GCTGCTTACA GGTCCACAT AGTCCATAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG
 TCCCCAAACA CTAAATCTGA AATGTTTTC ATCAGAACCC CTGTGGGGC TTGTTAGGAA TGCAGCTCCC TGTGCCACA
 NCCAGTCTCT GGATTCAGTA AGTCTGGAGC AGGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTTCTCTGGA TGTCCTGGG CTGGACTGG CTAGAATCIT TCTCTGGACT NTGTCATGTA CAGTGNCTCC ATCCTGGAGG
 CAAGAGAGTT GGSAGTGGCT CGAATCANAG CCGTCCCAA GATATCCCTN CTGTTGCATC GTTTGAAGCT GACGCTCTGT
 GTCINTACAC TGCTGCCACT GTTGINTCCT CGNTCTGCTT GCTGTTGCC CTGCCAGGN CCCGTCTGTC CGTGACANCC
 TTCATCTAC CTTTGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGGAAAC

SEQ ID NO:2363: (Length of Sequence = 412 Nucleotides)

GTCAGAGTNT TGATAGTTCT ACTGGGAGAC CACAAAATGA CATGGTCCAT CCTCCTCCTT ATCCAAAGAT GCATGGTTAA
 AATAATATAG ATTAGGAATC ATCGTTACCT CCAACAGTT AATCAATTC AAATTTTATG CCCAGACTGG TTTTAAAGA
 CATTTTCTGC CAAAATTTT TGAAGTAAA CACATTAAAG GTAGGTGTGG AGAACGATTA ATGGATTCAT TTTTATACTC
 ACATCTGTTT TGGAAATATA TTTTATGCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGTCCTGGT TTAGAAACAC
 TAAAGATCT CCAATCTTAT GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCTGAACT AGTGGCTAAC CTGINTAGGC
 ATCTCACGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATTT AATATTAGGA AAGGCAAGTN CCTGAGACA TTTATTTAAG CTAATCTGTC CTGATTTTTT GACTTTCAGA
 TTCATTACAC CCAGCCACAT TAGCCTGCAC CATTAATAAC ATTGATTCAA CCTCTCTTAT TGGCATAGAC AATACATCTG
 CCTTGTTTAC TACTCTATCC TCAGCTTGGT ATTCTCTAG CACAGAAGAA TGTCCAGTA GATATGCTGA AGAAATACCT
 GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGT ACCCTNGATA AGGTTCTAGA
 GAGGGGAGGT TCTA

485

SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TTTTTTGCCA TTTAATAAGT ACITTATGTA TATTATATCA CACAGCACTT TACAGTATAC TCAAAGATAG CCTAAATTAT
GAATTAAACA TGCAAATATT TNCITTTTCCA AAATGTGGAC AAAATGTCTT TTAGAGTGCT TTTGAACACT AGCCTTAGCT
ACTAAGCATT CATGGGTTTG ATCTTTCTTG CGACATGACT TTAAGTAAGT TAACAAAAAA TGTAGCTGTA GACAGTAATT
GTTTGATAAA TATGANCAGT TTTAAATGG CACTGAAITT ACATCTTTAA TCATTTTAAT AGGGCCATCC ACAGCCTCTC
TTGTGTCTCT AATTCTCAAC CTCGGGGGTC TTTAAAGGGC TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT
CTGTAAGNNG TCTATGTCTT CAT

SEQ ID NO:2366: (Length of Sequence = 294 Nucleotides)

CCAGCCATAC ACATGCCTTT ATTTAGATCA GCTTTTTTCA AAATGCAGCC AAACCTATGA GTTGGACAGC CCAAAGTAAC
CAGCCCTATT CCACTGAGTT AGTTTACCCC ACAGCAGTAG AACCAGTGC TGGTTTGGTT CCTGGCCCAT GGTGGGACAG
CGTGAAGGTG ATGGAGGGCT CTAGACAAG GAGGTGCTGA GTGCCACGG CAGGTGCTTC TGCAGACAGC CTAGAGCAAG
GTAAGCAGGA GCACTCGNTT CAGAACCGAG GCGGCTCGGA CCAGAGGGCA GGCA

SEQ ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGCTGACTT CCACGTTTTT GTCAGGGATG TGTTCAGCA TGTGGATTCC
ATGCAGAAAG ACTACCCTGG GCTTCTGTC TTCTTCTGG GCCACTCCAT GGGAGGGGCC ATGCCATCC TCACGGCCGC
AGAGAGGCCG GGCCACTTCG CCGGCATGGT ACTCATTTCG CCTCTGGTTC TTGCCAATCC TGAATCTGCA ACAACTTTCA
AGGTCTTTCG TCGAAAGTG CTCAACCTTG TGCTGCCAAA CTNTCCCTC GGGCCCATCG ACTCCAGCGT GCTCTCTCGG
AATAAGGACA GAGGTGACA TTTATAACTC AGACCCCTG ATCTTNCGG GGCANGGGCT NAAGGTGTGC TTT

SEQ ID NO:2368: (Length of Sequence = 187 Nucleotides)

GATCTTGAAG TTAAACCACT GTTGAAGTT TTGGTGGGA AGACAATTNA GCACTCTCTT CTGGANGTAA TGGAGAAGA
AGAGCTGGCT AACCTGCGGG CCAGTCAGCG TGAGTATGAA GAACTACGGA ATAGTGAACG TCCTGAAGTT CAACGACTTG
NAGAGCAAGA NAGCCGACAC CCAGAAG

SEQ ID NO:2369: (Length of Sequence = 341 Nucleotides)

GTATCTTTAG TAGAGGCGGG GTTCCACCAT GTTGGCCAGG CTGGTCTCGT ACTCCTGACC TCAGGTGATC ACCTGCCCTCC
TCGGCCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCCTGGCA CCATCAGTTT TTGATCCTGA TACTTGCTCG
TCCTCTTGGT TCTCCTCATC CCTAATTIAA CCTTGAACAC AAAATTCAAC AGGTTTTGGC ATATAGAATA AAGATTATCA
GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCTGTA TCTATCAGCA ATATTTAATT TGTCTAGAAA
TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCAAA ATGCCAGTAT GCAAAGGACA CTGGGGCAG CCTCTCAACA TTTTCTGCCT GACTGATATG
CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAAACATGT CTCTGTCTT ATTGAAGATG CCTATGCTCA
GGAAAGGGAT GCCTTTGAST CCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTTCTCGC TTGGATACCT
TGGAACTAG TAAGAGGAAA TCCCTACAGT TACTNGACTA AAGATTGAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA
CAACACACAC TTGGATC

SEQ ID NO:2371: (Length of Sequence = 320 Nucleotides)

486

CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCTT GCAGGTGCCG TTAGCCCTGT TTTGCACTGG
 TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCGG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT
 CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GONTGGGACT GGAGGCCAG GTGAATCTTG
 TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCGCGGGGCC TCCCACTCA AAGGCCCTAG AACCTTAGGC CTTCAATCCT

SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCTGGCA TGCGGCGAAA AGTTCTGGA GAAGGCTCC CCTCCCCAA AACACCGAG AAACGTGGGG ACCTCATTAT
 TGAGTTTGAA GTGATCTTCC CGAAAGGAT TCCCCAGACA TCAAGAACCG TACTTGAGCA GGTTCCTCCA ATATAGCTAT
 CTGAGCTCCC CAAGGACTGA CCAGGGACCT TTCCAGAGCT CAAGGATTTT TGGACCTTTC TACCAGTTGT GGACCATGAG
 AGGGTGGGAG GGCCAGGGA GGGCTTTCTG ACTNCTGAAT GTTTTNCAGA GCATATATTA CAATCTTTCA AAGTCGCACA
 CTAGGA

SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGGCG TAGGATGGCT CCAGCTTCCG GTCAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA
 TGTCACTGTG GTTGTTTCTC AGAGCCCGCA CGGCTTGGC CCTGGACACA TTGGCCTGCG CCATCACCAG CTCAATGTCA
 GGCAGTTCCA GCGCCGCTC GTCCACCTCT TCCTCTCTCT CCTCTCTCTC TTCTTGCAC TCCAGCCTCA CCGGGGCGCT
 GGGTGTCTGAC TCAGGGACCA AGGCTGAGGG CTCTGAGGGN ACCTTAAACT TCTCAGCTGC GGCTTTGTGC ACTTGCTGGG
 ACAAGTCTCT CAATCTTGGN CTCGCCAAAG ACCACATAAG T

SEQ ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CTGGCACTTA TTGATGACAT TGAGAGGCTG AAATATGAAA TTNCAGAGGT GATGACAGAG ATGACAATC
 TAACTTCGT AGAGGAGAGC AAAACGACTC AGAGGNACAA ACAGATAGCC ATGGGAAGAA AGAAATTCAA CATGNTCCC
 AAAAAGGGAA TTCAGTTTCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCCCAGTTCC TTTATAAAGG
 AGAAGGCCTA AATAAGACCG TCATTGGGGA CTACCTGNGG T

SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGTTTAGTG CTTCTTCAG GAGCTCTGGT AGGGCAGGTC TGGTGGTGAC AAAATCTCTC AGCATTGTCT TGTCTGAAA
 GGATTTTATT TCTCTTCAC TTATGAAGCT CAGTTTGGCT GGATATGAAA TTCTGGGTG AAAATTCTTT TCTTTAAGAA
 TGTGAATAT TGGCCCCAC TCTCTCTGG CTGTACAGT TTCTGCTGAA AGATCTGCTG TTAGTCTGAT GGGCTTCCCT
 TTGTGAGTAA CCGACCTTT CTCTCTGGCT GCGCTTAACA TTTTTCCTT CATTTCAACT TTGGTGAATC TGACAATTGT
 GTATCTTGGA GTTGCTGTTT TCGAGGAGGC AACCTTTGTG GCGTTCTCT GTAAATTTCC CGAATTGAA A

SEQ ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCTCC CTCAGCTGGG AACACAGCCA GGTGCCCTCA GACCCCTGGA TCTGCACAAG GGGGGCCTGC CCCCTCGCCC
 CAGCTATATA CAGCAGACC CATCTGCTG GCGTGGACA AAAGCTGGGA GCTCTGTGC CCAGTCAGGA GCGCCTACAG
 TCCACCAGCT GCGCGCCCG GTCCAGGGC CCACTGTGGT GCCAGCNAGT TTNTCAAAC CAGGGGCCA GCGCCAGCTG
 GNCCTNGCC AAGCCCCAGG CCTGTTGCT GGGATGGAGC CTCCACACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG
 CAAT

SEQ ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTTTATGTTT TTATTTATGT ATTTTAACTG ACTTATTTGT GTATCCCACT AGAACAATAC ATTCAATA TACTTGAGA
 ACTGTGCTG GTGCGTCATG GGAGCAGAGA ACTTGTCAG TGAATAGTTG TTGAAGAAAG GAGTAAAAAT TCCCCAAAC

487

CCTAAAGGCA TCCTTTTCGT AGTGTGTGTC CCATAGGTAT GGCTGCTGAG CACCAGGGCT GCTCACCATG CTCCCAAGAA
GCAGAGTCAG GGAGGCAGAC AGCAGGGTTT ATTAAGGTGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG
GGAGGAAGCC CTCGGTCTT TCCGAGGAAC CTTCAA

SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACTT CATCGACAAC ATCAGGAAGG TGTAACAAA CAAATGCTTT ATCAGGCTGG
ACTTCATTTC AAACCCCC AAAGCACAGA TCCATTACGC ACATTAAAG ATACCATCTA CCTTACTCAG GTGATGCAGG
CCCAGTGTGT CAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG
GCACTTTATT GGCAGTTGAA TGACATCTGG CAAGCTCCIT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACTGTGTC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGTA TTAAANGTGT ATTTNTGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT
ATTATAGCTT CTTCTGTG AGCATTAAAG AAAAGATGGC GANAGTCAAC ATAACAGAG ACCTCATCCG TAGNAGATCA
AGGAGCGGGG TGCCCTTAGC TTINAGCGGC GCTACCATGT CACGTGNCCT TTTATCCGGC GGCT

SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGTTTGAAA TATCTTTTTC CAATAGATAA TCTTATTAC ATTAATACAG AATCATTITA CATTCCTAAA TCAGACACTA
ATAGATGCTT TATTTTAGTG AATTATAAAG GAAAACAAA AGGAACTGT TGAGAAGTGT TCTTCATTAA CCNGTCTAAC
GNCAGCCCGA AGATCCNGNA ACACATGGAA ACTGCGNCAT GCTNCCNGCA GAGGCTGGGG AATGGGGGTT CTGCTCTCAC
TGAATGGTGG GGAACCTTCA ACTGCTTAGC CTGT

SEQ ID NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TTTTATTTGA TGANCCACAG TGAATAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTGNG
GGAGGTAAGG GGGTATCACA GCAGGCAGCC TCCTCTGNTT CINTCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT
GCAGGTCACC CACGGCGGCC TCAGAGGGAC AATTINTTCC CTCTAGAAAG CCINTTCCAG TGTTCAGTGG ATGNTTTGAG
GACAGNICTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CTTGAAGCA AGTAATGTCA ACTTTGAGCA CTTTGTGAG TTTTGAAAAA TCTTATTGTG TGCTGCACAG
GTTAATAAAT TATCAATTG TAATTCAGCA TGTGGTGAG AGACACGGTC ACTGATTCAC ACCCAGTCCC TGCCACAGAC
CGTCTCAGAC ACGCAGAGT GGCTGTGTC ATGATTCACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCAGAGTGG
GCTGTGTC TGGGTGTTAC CTGGCTTTTG GCTCCAGCT CACTCATAGC CATGTCCACA TGGGGGGCTT GCACACAGGA
TCACTCACAT ATGTACATGT ACCCACCACA AACGTGCAAA GCTCCTTGCA CACATGCATG CACACAAACG TGGTACACAA
GT

SEQ ID NO:2383: (Length of Sequence = 406 Nucleotides)

GACCCTTTTT ACTAGCCCT CTGGGTTTG CAACATGCTT TCTCTCTAC CTTCTCATTG AATGAGAAAA AACAGCCCAG
CCATTTTTTG CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTGACT TTCACAGTAA CTCAGTTTGA
TGTAGGCACT CCAGGCATTA TTATTTTCAT TTTACAGATG ATGCACTGA GGCTCAGTGT GGTGAAACAT TTGGCTCATA
GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGN CTTACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

488

CCAGACTTCA TGTGAAGGTG GCTGCTCTG GGGTGATGGT GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTATTT
TCAGAT

SEQ ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCTGATCC
TTGTGGACGA ATGTNCCCGG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTTACA GGGCTCGGGA
AAGGC

SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTINATT CATTCTCTTC TATTAACTTC TCTAAAGGAA ATTGGGCACC TGTAATCCCA GCACTTTTGGG AGGCTGAGGT
GGGTGGGTCA CTTTINAGGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAAA
NTTAGCCAGG CTGGTGGTGT TCGCTGTAA TCCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG
CGGNGGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

SEQ ID NO:2386: (Length of Sequence = 290 Nucleotides)

AAAAAATAAA GTGAATTTAT TGGTTCATGT AACTGGAAG TCTCATGAAA ATGTCAGCTT CAGGAGAAGC TTGACCCAGC
AGCTTCATGA TGTATGGAAA TACCTGGGTT TTTTGTTTCT NCTCTGCTAC TGTTGTATCA GCTTTATTCC AAGTCTGGCT
TCCTTTGTTG TTGCAAAATG CTTTGTGAGA AGAAGCCTGG GTCCATCTGT TAGGNTTAAG TTTACTCTGT ATGCTGTAGT
AGTGGCTATG ACAAGATTAG GAAGTGTATT TTCTCCTCCC ATATTAAAG

SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCTCTGTGA TTGTACATG AAATGCACAT CCAAAACGGG TGACTTGGA ACGACCTATT AGGTACACG GAGTCCGGCC
CCTGGGGGCA AAGCCTCATC GATGCCACG GGGGTGGCC AGCACTTTCC TTGGGCTGTG GCGTGTGCAC CCGGCTTCCC
CAGCGGAGAG TCAGTCAACA CCCAGGCCC TTTAGCTCTC TGGCAGCAGC TCCAAAACG CACTTGAGGA ACCAATAATT
CCTTGGGGGT TAATAGCTGT TCCCCAAGAA AAGGGTTCTG TGGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT
TTAGGCAAGA AGCTTTTCTA TAGGGCTTGT TCAGAT

SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTGGTA TAAAACTTA AGACGGCATT AGAATTCTTA AGAAAAGGTG TAAAATTAA AAAGATGTGC AAACAACAAA
GAATGCCCGA CCTGAACCA GACCTAAAGC ACCTTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG
GACACCAGGA CAGTGAGGGA CGGGTGGCTG TTCAGTGGGC AACAGATCTG GAAGGAAAGA TTTTCA

SEQ ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCTNCAGTGA GGAGAAATCC CGGGAAGTGT ATTGACACAA AGATTCTNAT TGCATTGTGA
TTTTTNTATT AAAGTTTGCA TGGTTTCTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGGN AGATTCCAAG
GGCTTCTCTN GAAGGGGGAT TNGCTGCAN TGTAGATTIN CCTCTGAAGG AGGCTGGCCC CAAACTTGGN CCTCTCATG
ACCCCTCCT

SEQ ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCTG GAGAACGGG TCTCGCTATA TTGCCAGGC AGGTCTCGAA CTCCTGGGCT CAAGCTATCC TCCCGCCTCT
NAGCCTCCGT TTCCAGAAGG TCACCAAGTA ATATCTGCTT TTCATCAGTT GCAGTTAAGA TTTTNNITTC TTGAAATACT
GGTTTTCAAA CAGATCAGAA TTACCTGGGG AGCTTGTTTA AAATATAAAT GCCCAAGGC CAGCTCCAGG ACATTCTGAC

489

TCCATAGGTA TGTGGTAAGC CCAGGGAATC CAGGTAAGCT CAGGTAAGCC CAGGGTAAGC CAGGGAATTG TTAACAGGAA
GCTGGTGGGT TTCTGGCACC TINGACANCA CTGAATTCTA GGTAGCTTGC C

SEQ ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTTCAGCA GGCTATGAAA TTTGTGGGC ATATAAANAA CTGGAACTTT CAACAGGGTG GTTTTGAAAC TAGNGCATT
ACCAATAAAT GNCAAACCCA CAAGGACAGT GCATTGTGTC ACATAGANGA TCTGGAAAGT ACAGCTGTAA ACTATAATCN
CCAGTCTCTG AGTTAGCACC TTCCACGNT AGTCTCTTAC

SEQ ID NO:2392: (Length of Sequence = 234 Nucleotides)

TCGCTGAGGT GTTGGTTTG GAATAGGGAA AAAGGTAAGA GACTAACGTG GAAAGGTGCT AACTCAGAGA CTGGAGATTA
TAGTTTACAG CTGTACTTTC CAGATCTTCT ATGTGACACA ATGCACGTG CTGTGGGGTT TGTCATTTAT TGGTTAATNC
TCTAGTTTCA AAACACCCT GTTGAAAGTT CCAGNTATT ATATGCCCAA CAAATTCAT AGCCTGCTGA ACTG

SEQ ID NO:2393: (Length of Sequence = 337 Nucleotides)

TCCAGAGGCG GATTGAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TCTGCCTATC TACAGGACAT TGAGAATGCC
TATAAGAAAA CCTTCTCC TGAGATGAGT GAAAAATGTG AGENTTACA GTATCTGCA AGGGAAGCTC AAGATTCAAA
AAAGGTGGTA GAGGACATTG AATACCTGAA GTTCGATAAA GGGCCGTGGC TCAAGCAGGA CAATGCACT TTATACCACC
TGGGATTACT GGTTCAGGAT AAGTTTGAGG TGCTGAATTA CACAAGCATT CCTATCTTIN TNCGGAGT CACCATTGGA
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAATGTTTA TTTTATATAC AAAGAATTAT CATGGTTTIN CATTGAGTAG ATGCCCCGGA TAATCCTCTG AAGGAAGAGC
ATTTAGTCCA ACTTAATGAA ACCGATATCC TTGCGTACT GACGAAACA CTGGCGGCAC ATATTGAGGC CATATTTCCG
GATCANACCG TGCCGGTTTG AACAGACAG ACAAGAGCGA GAACCTGCC C

SEQ ID NO:2395: (Length of Sequence = 335 Nucleotides)

CTGAAAGCTG TAACACCCTC AGGTAATAAC AAAAGGGATT TTTATTTTAC AGCTAAAGGG AAAATAGGTG GAGAAGTTAA
AAAATAATGT CTGATCCTGT TCCTAAGTTC CAACTATAG CCAACACTCT GATGCTGCTC TTTTCTTGT AGGACCAACC
GTCCAGTTT GCCTGGGACT TTCTATTTT TACAGAGTCC CAAATCCTAG GAACTGGAG CAACTGGTAC AACTGGTCAC
CTACTCTGTC CCTCTGGTA AATCAAGNCA ACTGTGACCA TCCAATGTGC CATCTTACAG GGNAAAGTTA TAACCCACTA
TTCCCCIATA ACATA

SEQ ID NO:2396: (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCCGTCC TGCCTCGAGC AGCACAACCC TGCAACCCA CCATGGATGT CTTCAAGAAG GGCTTCTCCA
TGGCAAGGA GGGNGTGGTG GGTGCGGTGG AAAAGACCAA GCAGGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG
GTCATGTATG TGGGATTACA TTTTITTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEQ ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAAA GAATGTGGCA ACTTGCTTNT NCCTAAAAGG AGGAATTGGA ACTAGAATGT GTGACTCTGT GGGGACTGCA
TAGGTTTGT AATTGACCTA TAGCTAAACC TTAATGTGTT TGTGTGCTA TACATTGCTT TCCGCAATTC AAGACATCCA
GAGCTATTA CCAACATTTT CCTGTGCAAT AACCTCTGCA TGIGAAACT TTTAACAGTT ACTGAACATAT GTAAATATGT

490

GAATTTTTTT ATTAGGTGG ATGCATTTTT NGTCGTGTTA CTGCTCTTCT CAGCTTTATT CAATAAACTT GCATTTTAAAG
GGTGTATTG GCAATTTTAA CTTAAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEQ ID NO:2398: (Length of Sequence = 421 Nucleotides)

GACAGGTTGG TCTTACCCAC TGENTCCCAG TCATGCTGTA AACAGGGCTT GCTTTGGAGT CTGTCAGACC TGGCTTAGAC
CCAGGCTCTG ACCAAATGGG TGAGTTATGC AGCTACTTGG TGGCATCTAA TACCCATATCG CAAAGGACTG CCGTGAACAG
GAAGGAGGTG TCAAATTGG CASTGCCGTA TGAGGTGAGG CCAGGACCCA GGAACCTCTA TTCCCTCCCA TGCTCAGGAA
CAGTAAGTGT TCTTCTATCT GCAGAGGTAG ATGCTTAGCA CATCGTGGGT ACTTCACTCA TGATTGCTAA AATTTGAATT
TGTTGATAAA GTCATTTCAA AAGTCAGATT CTAGGACCAA AAATACAATA TCTGTCCAAC ATGGAAGTGT TAGATCATGG
TTTTTCCTTC CAGCCCCAGG A

SEQ ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTGAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGCTGCTGC CCCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG
TGGCCCCCTT TTCTTGACCT CCTCCTCCTT CAAGCTCAA CACCACCTCC CTTATTGAGG ACCGGCATT CTTAATGTTT
GTGGCTTCTT CTCCAGCCTC TCTTAGGAGG GGTAAATGGTG GAGTTGGCAT CTTGTAACTC TCCTTTCTCC TTCTTCCCC
TTTCTCTGCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTCAGTC TGTGGTCACA TCCAGTGGAT TG

SEQ ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGAAGG ACTGGCACAA GTTCTGCCIN AAGTGGGAGC GCTGCAGCAA GACGCTGACG CCCGGGGGCC ACGCCGAGCA
TGACGGGAAG CCGTTCTGCC ACAAGCCGTG CTACGCCACC CTGTTGGGAC CCAAAGGCGT GAACATCGGG GGCGGGGCT
CCTACATCTA CGAGAAGCCC CTGGNGGAGG GGCCGAGGT CACCGGCCCC ATCGAGGTCC CCGGGGCCCG AGCAGAGGAG
CGGAAGSCGA GCNGCCCCC GAAGGCCNCA GCAGAGCCTC CAGTGTACCC ACTTTCACCG GGGAGCCCCA CACGTGCCCC
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEQ ID NO:2401: (Length of Sequence = 385 Nucleotides)

CATCCACCCA GGGATTAGGG TTCAAGTAGC AGCTGCTAAC CCTTGCACCA GCCCTTGTGG GACTCCCAAC ACAAGACAAA
GCTCAGGATG CTGGTGATGC TAGGAAGATG TCCCTCCCCT CACTGCCCCA CATTCTCCCA GTGGCTCTAC CAGCCTCACC
CATCAAACCA GTGAATTTCT CAATCTTGCC TCACAGTGAC TGCAGCGCCA AGCGGNCATC CACCAAGCAT CAAGTTGGAG
AAAAGGGAAC CCAAGCAGTA GAGAGCGATA TTGGAGTCTT TTGTTCACTC AAATCTTGGA TTTTTTTTTT TCCTAAGAG
ATTCTCTTTT TAGGGGAAT GGGAAACGGA CACCTCATAA AGGTTTCAA AGATCATCAA TTTTT

SEQ ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTTG GTATCTCTAT TAAAGTACAT GANCTCCAA GGAAATAGA GCGATTACT CTCTCCAAT CAGTGCATAT
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG
CAGATGTCTA CTTGGAATAT ATTACCGAA ACTTACCTGA AGGGGTGCTC ATGGAAGTAA CAAAGACACA ATTAGAACAG
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG
AGGCCATTTT TGCCTAAATT TTGAAATGAG GTTGGGCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)

491

TCATTAAGTT ATACTCTTGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTTGCAAT AGGGATTCTC TAATTCTCAT
GTTAATCTGT TTGTACCAT TTTTACTTTG TCTTTTGTGG ATCTCTTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG
TTGTATTGTA TGAAATGTC

SEQ ID NO:2404: (Length of Sequence = 399 Nucleotides)

TCCCAAAGT GGTGTGAACA TTTTACACTC CTACTAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATTT
GGTGCTGTCA ATCTTTTAAA ATTTTAGCCA TTTTGTGGT TGTATAGTGT TATCTCATG CAGTTTAAAT TTGCGATCC
CTGAATGTGT GTAGGTGTGT ATATGTATTA TATAATATAT ATATNATNCT TTCACTTATT TTGAAGTAAT TTCAAAGTTT
CCAGAATAAT ATCAAGAACT CCTGTACTCC CTTCGCCAGA TTCTCCAATT GTAATGTTTT ATTGCATATG CTCCATTGCC
CATCTCCTC TCTACTTATA GCTTGCAATTA GTGTTTTCTT GGAACNNTA GAGATGAAGG TGGAAAAAAG GATGCGGGT

SEQ ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGT GACCTGACCA CCCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTTC CACAGGAACT CATCTCCTCA
GCATGCAGGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGACAGAG CCAACAAAT GTTTGGACCC
CAAGTGCTTA CGACCCGSCA CTACGTGGGC TCAGCAGCTG CTTTTCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG
TCCTGGTGGT GCCTATGGGA CTGCTCAGCC CCCACCTCAC TATGGGCCCA CACAGCCAGC TTATAGTCCT AGTCAGCAGC
TCAGAGCTCC TTGGCATTG CCTGCAGTGC AGTTACCTAT CTTCAGCCAC AGCCACAGGC CTATTGCTGT GCATGGGCCA
TTTT

SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTTTATTGG TCTATAATTA GGGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTGTCTTA
ACACAAGATA TATAATGNC AATATYAGTT AATTAAATTT YAATTAAAAM CAGCTGCTTT GGAAATCCAA CATGTATACT
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

SEQ ID NO:2407: (Length of Sequence = 350 Nucleotides)

TCCAAGGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCACGTACCC
ATGAGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAAA CATCCCTAG AAAGGCCTCC AGAGAGGGGC
TGAGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCCGCCG GCTCAGCCCT GGCCCTCCA CTGCAGCCAT GGGTGGCGCC
TCCCCCTACT GCTGCCCAG GGCTCTGTCC AGGTTGCTCT TGATGGTGTG GAGGAAGTCC GTGGTGTCA GGAAGTGCTC
GTTCAGCTTC ACATTGCTGA GGCGTGAAT

SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATNGNTTGG GGTGCGNAGA AATGGATGTG CGGAAGAAGA AGAAGAAAAA AAATCAGCAG CTGAAAGANC CAGAGGCAGC
AGGGCCTGTG GGGACAGAGC CCACAGTGA GACACTGGAG CCTCTNGNAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA
AGAAGCCCAA AGGGAAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

SEQ ID NO:2409: (Length of Sequence = 331 Nucleotides)

TCTCTCAAG AATTTTCAAC CAATCGACCG TCCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA
GGCGTTGCAA CAAACCATAT TGGACAGACG ATGGGGGCGA CCCATCGGGA CCCGACGGGC CTCTGACTCC AGCAATACAG
CGAATCAGCG GCTTTCGGGA ATACATTTTT CGGAAAAGA CTCTCTCTC GGTTTTCTGC TCTGCACAG TTGAATTTTT

492

CCCCAGTTTT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCCTC CGCACCAGT TGGGCGCTCC CGGATGATGC
CCTACCCCTT T

SEQ ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGAGC GTGCATTCCC AGTGGGCGAA CGGGAATTTC AACGGAGAGA GGGTATCTT GTGGGGGGCT
ACCCGTGGAG AGCAAGGGGC CCCCAGGGT TGGTCCGTG AAATTNAGGT CGCCC

SEQ ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GTTCTCTTGT CCCCCAACT TTACCGGAA GCCCCAGCCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC
TGACGGGTCC AGATACGGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTC
CCTCTNTCTG GCTCCAGAT CGTCAAGGGC AAATTGGCAG GCAAGCGCA CGCTATCGG AGTCTCAGC AGCTGTCCCC
AAGCTGGAGA AGCGACCCCT CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CCTCAGCCCC CCAGGGCACC
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TGCACCGGTG CACCAGGTGC CGTGTGGAT TGTNACAGNN ACGTGGGTNA TGAAGGTAAC CACCTACCGN GTGCACGTGG
CCNAGCAGCA GGACGTGCAC CTGACTGTNA CGGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAACTT GCCCGTGCAG
CTCTCACCA TCCGTGTGGC CAGCACCAAC CCTGCTGTGC AGGCCCTTGA CATCTGGCTG AACTCCACTG AGTACGGGGG
GCTCTGCGAG AAGCTCCGGG CACCCATCCG CAGGGCAGCC CATGTGGTCA TCCACCAGAG CCTGGGCGAC CTNTTNNTGG
AGACATTTGC CTCCTGGTA GAGGTCAACC CGGCCTACTC AGTGCCAGC AGCCAGGAGC TGGAGGCTTG CATAGGCTTG
CATGCAGACA CGTGCCAACG TGAAGNTGGT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TMTAATTNC
CGCCCCATGT TGGTGGCTTA ACTTGATNGG GAAAGTGENT TNGNCAAGCG GCAAGACCCC CTGGGNCIT NAACTTGNT
TGGCAAACGG GGTNCCTGCA TGG

SEQ ID NO:2413: (Length of Sequence = 203 Nucleotides)

TGCTCTCCC ACCCCCTAGC CATGCAGNGG TGAATNGGG AACCCAGNN GGGGGCTGAG AAGCTCCAGG CCACCTTNAG
GGAATCCAG AGGGTCTTTC TACCAGGAAG AAGTGCGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG
GGACAAACGT TCCGTCTGCT CCGAGTCAG GAGATCGAGT CTC

SEQ ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGGCAGG ATGGGGCTGG GAAGTCCAAC CCCACGATT TGGGCTCAGC CTTGGACATG GAGGCTGAC AGCTGTGTG
CTTTGGGGAT CC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTTTTCCCTT CTGTGGNCCA AATGCANCAT CTINATACAC GTTGCTTAAC CTAGAANCCT GGCTCCACCG TGAATTCTAA
TTGGTCCGTG CTATCGAGGC ACTGTCCCT TAACTGGTCT CGCTCCAGTG GCCCCNACTG CTTTCTCTCC TCTTCCAGNA
ATGGCTCTTC GGGCCAGAG TTGAATCTC GCGATCGGA TGGGGACGGA GTACCGGCT GGGGTGTCCC AGAGCCCGGA
CTGAGCTGGG GAGTCAAGAC CTCGGGCGAT GAGGGCTGAG CAAGTCGGAG TCGTAGGTCC AGTTCCTCCC CAGCTTCTCC
TGCTCCAAT CTGTGGGT CTGGGGTTC TTGCTCTCC AGCGGGGTG AGCTGCTGT GGAAGAGTCC TCCCGGATC
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

493

ATGTAATACA GTGTAGAAAG CGATCATGTC ATAAGCAATG ATTCTGTACA ATCAINONGC AGAAAATTAG TTTTGGAGAA
 TTCTTGGTAA TTGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGTGCTTAC AATTTACAGG GATYCTTTTC
 TTTTTCAAAG ACCCAAAGAY ACGTGGTCAG AAAAMAAAAG CTTGAAGTCT CAATGCCCTAA TGTCGTGCAC ATTKNACAGG
 GACGC

SEQ ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGTTTTCGAA GATGATGGAA CATCCCATAA GCCCAGGTGT GCAGCTAACC TTTAGAAGCT GGAAAAGSCA AGGAAACATA
 TTCGTAGAG CCTCCAGAAG GAACACACGT CTGCACACAC TTTGTTTTTA GCTCAGTGAA ACTGATTTTG GACTACTGAC
 CTTCAGAACT GTAAGATAAA TTCTGTGTGT TTTACGTTTG TGGTGTATATA GAAGTTACAG AAATGAATAT ACTTACCGTA
 GTTTAGAGAG AGATGGGAGG ATACTTTTTT TTCTCCCTTC TTTTGAAGG GAGGTAGGTC TCCTTAACCTC CAGAGGAAAG
 ACTGTCTTT CTTCATATAG GGGCCCTTGG ATTCTTAATT CATGGGAGTT GTTTAGGAGA TTGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CCTGAGGGG GACCATCATG TCGGAGACCG CATTGGTGCA GGTCCTACCC CACAGCCCAT GCCCAGCCTC
 CTGCAGACTC AGGTCATCCA GCTGGTCGAT GGCTCTTTGC ATACCTGGTG CCTCTCTCTC TCGGGCTTGG CAGGCTTCTC
 TGGGGGCTTC TCAGATGACT CTTTGGCCTT CTCTCTGTTC TTGGCTAACT CCTGGGCCAG CTCTGAACGT GCCTCTTTGG
 CTCCCTCTTC TACCACCTCC TCCCGTTTGG CCAACTTGTCT CACGGCCGTC TTGGTAGTGG CTTTGAGGCT CTCTTGCTA
 TCAGCCCGCT GTTTGATTTT GCTGGGCTTG AGGTTGGTAG GCACAGCCCC AGAAGCCAGG NCCTTCTGCG TGGCCACAGG
 GTAACGCAGG AAGTCCAGAT GCGAAGCTT TTCTAGGCCC TCCAAGATCT TGTTTTGGGG AGCATTTCCT GGAAAAGCA
 CACGCACAAT CTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGGAGATC
 TCAGCCTCCT TCCCATGGG CAGCACGATG CCTGINTTGG CTTTACTATT GCCTGCCCCAC TTTTGCATGA GGAAGTGCAT
 CTCTTGCTG TOCTTGACAG GGTTGAGGAC ATACATGTCC AGCCGGCCCA CACCCATTTT GTTGAAGAGG GTCAGTGGCT
 CAATGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCCAGG CGGTTAAGT GCTGCAGAGT GAGGCAGGCC
 TCCTCAATGC TACGCTTGGC TTTCCGGGAG GCATCAGGAA GCGGCAGCTT CTCAGGCACG TTGAAAAGA CAACTCCAAG
 CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAACTG CTAGAGCCCT GGNACTGCTC CTCTCTAGC TCTGCCACTT
 TGCGCTGCAG TAGTCCATTG ATGCCTGGCA GGTGTCTGTC CCAATGTGT GTNAGTAGCA CCGAGTCAAT GCGGTCCAAG
 TNCCGTACCA GCTTCCAAAA ACAGGACTTG CGATCAGAGC CACCATCCAC CAGGATGTTG AAACCATTTGA CAGCAAAGAG
 GGCAGAGTCC CCAAGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGGAGA GCTTGAGGAA GCCCCCTGAG GTGGGGGGCT
 CTAGTAGGTC AAATGGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCAAGCCGTC CATGGTGGGC
 AGAGTGGGCT CAGGGTTTAG CCGGAGGTGC AGGGTCTCTT GGGAACTGGA TAATCCCAGG TGCTTCCAAT CACCTTCCCC
 TAAGCAGGAC ACGGTAAGGA AGGCCTGTAT CCCAGGTCT CTATGCTGA GCAATTGGGA AATCTCGGGG TTGTGAAGGA
 CCTGGGCAA GTTTTCATAT GAGTAGGTGC CACTCTGTAG GATGAGGTCT CCCCAGGCT CTAAACTTTG CCCACTCAAG
 ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG
 GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCTG

SEQ ID NO:2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TNGCTCACT TCATGGGCTG GCCTGGAATT GACGATGGTG CAAACCCAAA TNATCCTGAT
 GTAATTNATG AAGATTATGG AACTGCAGCG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCACAGA
 CGTCACTGAT AAAACCGGTC GGGAACATCT CTGGTCTAT GCTGTGGTGG TGATTCNTC TGTTGGTGGGA TTTTCCCTTT
 TGGTAATGCT GTTTCINCTT AAGTTGGCAA GACACTCCAA GTTTGGCATG AAAGGTTTTG TTTGTTTTCA TAAGATCCCA
 CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGTG CTGTGTGGTT GATGCTGCCA TGTAAAGCTGG
 ACTCCTGGGA CTGCTGTGG CTTATCCCGG GAAGTGCTGC TTATCTGGGG TTINCTGGTA GATGTGGGCG GTGTTTGGAG

494

GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACCTCTCA GGCAGCTAAG
CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCCTNTC TTACAGTAST TCAAATACAA AACTGAAATG AAATCCCAT
GGATTGTACT TCININCTGA AAAGTGTGCT TTTTGACCCCT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAATAA
TTGACCTGCA AAGTTAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC AACTGAATA GTCTAATCTA CATGTAACAC
ATATTINNGT ATGATTTTCT ATACTCTAAT CAGCACT

SEQ ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCCG CCCAGGTGGC CGCTGGCTGC TGAGCTCACG CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC
TTTGCTGCTG CTGGATGTTT GCTGGCTGCA GGTTCCTGCTG CTGCATCTGT AAGTTTGTG GCTGCACCTG CTGGGTCTGC
ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGTGAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG
GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGGAG GGGGCTGTG TGCTCAGGGG GCTGGTGGC AACTCCCCC
GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCAAT GACCATTCAA ACTGGTGGAC
CCGNCACAG TGAAATTGAG GGGCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCACAG GCAGGTGGGA
GAGACGAGGT GGGCCAGTNT TAAAGGCCAG CCGGCCGCC CCACCCANCG CCGCCATYTC GGGCTTGGCC GCCAGTTCA
GGTNCCTNAT GCCCAGGTGG GTGTGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGGACG GAGACTGCTG GAACGGGGAG
GGCAGVAGTG GCGGCGAGGC CACGTCTGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGGAGAG GCATGCCGGA
GCTGTCCAGC AGGCAGNCCT TGCGTCTG GGAFTCTTC CTCCTGCTT TGAGGTCTT GGCCTCCTTG CTTCACAGG
CCAGGCCTTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGGC TTGAGGCTGC CCAGGTAGCC GTTGGGCGAG
CAGAGCGNGG GCGACAGGGT GGGGTGCCC CCCAGCGGC TCCGTGCAGC TGCGGGCTGC GCACAGGTT GTACTGCTCC
AGCAGCCTCA CGATGTCTG ATGATGCTC TCTNTGCGA TGTGCGCGG CAGGCGGTCC ATATGATCCG TGATGTCCCG
GTGGCAAG TGSTCCAGCA GCACCTTGGC GGTCTCTAG CTGCCCTCCC GGGCGGCCAG AACAGGGGT GTCTCTCCC
TGTGTCTG CATATCTTTG TTAGCCCGT TCTTCAGGAG CACAACCTCG GCATCCACAT TGTTCACNGC GCGGGCCAG
TGCGGGCGG ACTTGCCAG GTNATCTAGC GCGTTGACGT CCGGTGTGA GTTGATGAG TCTCCAGCA TGCCCTCCAC
GGCAGGCGG GCAGCCAGG TCAGTGGCGT CGTGCCATCA TGATGCGGG CATCCAGGTG TGTGGCTCG TTCCGGATCA
GGATCTTGA AGACACCTTG TGCGTCGCA GACACAGCCG CATGCAGCG GGTGCGGCC ATGTGTCTT GGATGTTGGC
ATCTGCGCTG GCTCCAGCA GCGCTTGGC GGCATCAGAG CGTGAGTAGC GGGCGGCCAG GTGCAAGGCG GTCTCGCCG
TNCGGTCTGT CTGGTTGTG AAGCTGGCGC CCTGGTAGAT GAAGTCGGAG ATGACGGCG GCGGTCTCT CTCTCTCTG
CTGTGCCCC TCTCCAGGC GCGCCGCTG CAGGAGGGA TCATGAGCG GGTGAAGCCA TCAGGCCCGC GGACATTGAC
GTCCATGAG TCGGCTCAA CCTCACCTG GGGCGGTGTG GGGGCCATG CANACATGCG CAGGTGAGG GCATCCAGGT
GCTGCTGAGT CCACTGCCG TGGTCTGTCT GGTCTGCCG GTCAGGCAGA ACCACGGGCT CCGCAACCG GAACTTCTTG
GTC

SEQ ID NO:2421: (Length of Sequence = 1452 Nucleotides)

CCAGCAACTC AAATTCACCA CCTCGGACTC CTGCGACCGC ATCAAAGAGC AATTTCAGCT ACTGCAAGNT CAGTACCACA
GCTCAAGCT CGANTGTGAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CGTCACTATG TGATGTACTA CGAGATGTCC
TACGGCTTGA ACATCGAGAT GCACAAACAG GCTGAGATCG TCAAAAGGCT GAACGGGATT TGTGCCAGG TCTGCCCTA
CCTNTCCAA GAGCACCAGC AGCAGGTCTT GGGAGCCATT GAGAGGGCCA AGCAGGTAC CGCTCCCGAG CTGAACCTA
TCATCCGACA GCAGCTCAA GCGCACAGC TGTCCAGCT GCAGGCCCTG GCGCTGCCCT TGACCCACT ACCCGTGGG
CTGCAGCCG CTTCGCTGCC GCGGTGAGC GCAGGCACCG GNTCTCTCT GCTGTCCCG CTGTGGTTCC CAGGCCACC
TCTCAAGGA AGACAAGAAC GGGCACGATG GTGACACCCA CCAGGAGGAT GATGGCGAGA AGTGGGATTA GCAGGGGGC
GGGACGGGA GGTGGGAGG GGGACAGAG GGGAGACAGA GGCACGGAGA GAAAGGAATG TTTAGCACAA GACACAGCGG
ANTCTGGGAT TGGCTAAACT CCCATAGTAT TTATNGTGGC CGCGGGCGG GCGCCAGCC CAGCTTGAG GCCACCTCTA

495

GCTTTCTTCC TACCCCATTC CCGGCTTCCC TCCTCTCCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG
GCAAGNTAAG GCCTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTCGC GANGCARGCA AGCCCCNGCC
CTTCCCCCGT TTTGAACATG TGTAAACGAC AGTCTGCCTG GGCCACAGCC CTCACACCT GGTACTGTCAT GGACGNAATG
CTAGCTGCCC CTTTCCCGTN CTGGGCACCC CGAGINTCCC CCGACCCCGG GTCCCAGGTA TGCTCCCACC TCCACCTGCC
CCACTCACCA CCTCTGNTAG TNCAGACAC CTNCAGGYCC ACCTGGTCCT CTNCCATCGC CCACAAAAGG GGGGGCAGCA
GGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGGT GGGGACCCA GGATTCCCCC TCCCCTTCCC AAATAAGAT
GAGGGTACTA AAGTTGTCTT GGTTTMAAT TTATTATTAT TTTTTCITT TTCCAGTATA CTAGCTTGTC TTTTAAGAAA
GGGGATATTA AAAAAAAAAA AAAGACAAAA GTGTTTTTAA AAAAAAGCAA CACCCACACC TGGTGTCTGT ATATAGTCAG
CTTATCTCGT GTTCAATCGT CTGATCTCTA CAGAGAGAAG TGGAAAATGC TGTATCAAGG GTGGGCTTAG CTGTGCCITT
CCAATAAAGA TG

5 WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

10 or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

15 or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

20 SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

 or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

25 4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

30 5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.

6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.

35 7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.

5 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.

10 10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

SEQ ID NO: 316 - 2421;

or a polynucleotide complementary thereto.

11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.

15 12. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1001-1500.

13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.

14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.

20 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.

25 16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS 485, 650, 1834, 2073, 2092, and 2353.

30 17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions sufficiently stringent to require at least 97% base pairing.

18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.

19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.

35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.

22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.

23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.

25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.

26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.

27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.

28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.

29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.

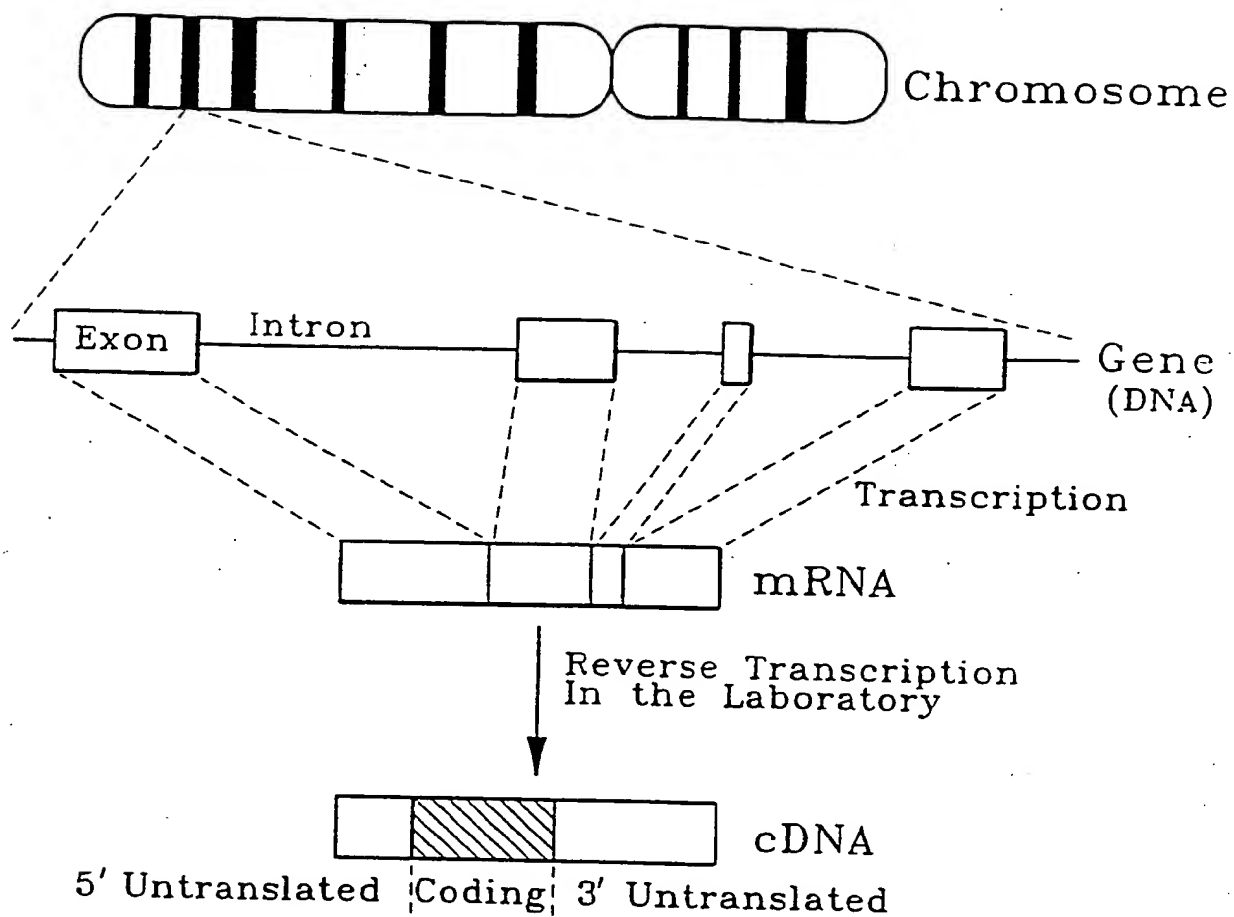
30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.

31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.

32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.

33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.

1/1

*FIG. 1*

SUBSTITUTE SHEET



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁵ : C12N 15/11, C12Q 1/68	A3	(11) International Publication Number: WO 93/16178 (43) International Publication Date: 19 August 1993 (19.08.93)
(21) International Application Number: PCT/US93/01294 (22) International Filing Date: 12 February 1993 (12.02.93) (30) Priority data: 07/837,195 12 February 1992 (12.02.92) US (71) Applicant: THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Washington, DC (US). (72) Inventors: VENTER, Craig, J. ; 1718 Nordic Hill Circle, Silver Spring, MD 20906 (US). ADAMS, Mark, D. ; 12812 Sage Terrace, Germantown, MD 20874 (US). MORENO, Ruben, F. ; 14415 Coral Gables Way, North Potomac, MD 20878 (US).		(74) Agents: ALTMAN, Daniel, E. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US). (81) Designated States: AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 25 November 1993 (25.11.93)
(54) Title: SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT (57) Abstract Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	FR	France	MR	Mauritania
AU	Australia	GA	Gabon	MW	Malawi
BB	Barbados	GB	United Kingdom	NL	Netherlands
BE	Belgium	GN	Guinea	NO	Norway
BF	Burkina Faso	GR	Greece	NZ	New Zealand
BC	Bulgaria	HU	Hungary	PL	Poland
BJ	Benin	IE	Ireland	PT	Portugal
BR	Brazil	IT	Italy	RO	Romania
CA	Canada	JP	Japan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CC	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SK	Slovak Republic
CI	Côte d'Ivoire	LI	Liechtenstein	SN	Senegal
CM	Cameroon	LK	Sri Lanka	SU	Soviet Union
CS	Czechoslovakia	LU	Luxembourg	TD	Chad
CZ	Czech Republic	MC	Monaco	TG	Togo
DE	Germany	MG	Madagascar	UA	Ukraine
DK	Denmark	ML	Mali	US	United States of America
ES	Spain	MN	Mongolia	VN	Viet Nam
FI	Finland				

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 93/01294

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all) ⁶		
According to International Patent Classification (IPC) or to both National Classification and IPC Int.C1.5 C 12 N 15/11 C 12 Q 1/68		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
Int.C1.5	C 07 K C 12 N C 12 Q	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸		
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹		
Category ¹⁰	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
X	SCIENCE vol. 252, 21 June 1991, WASHINGTON, DC, USA pages 1651 - 1656 M.D. ADAMS ET AL. 'Complementary DNA Sequencing: Expressed Sequence Tags and Human genome Projects' see the whole document ---	1-11,15 -23
P,X	NATURE vol. 355, 13 February 1992, LONDON, UNITED KINGDOM pages 632 - 634 M.D. ADAMS 'Sequence Identification of 2375 human brain genes' -----	1-11,15 -23
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>¹⁰ Special categories of cited documents : ¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reasons (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 48%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"A" document member of the same patent family</p> </div> </div>		
IV. CERTIFICATION		
Date of the Actual Completion of the International Search <div style="text-align: center;">07-07-1993</div>	Date of Mailing of this International Search Report <div style="text-align: center;">22. 10. 93</div>	
International Searching Authority <div style="text-align: center;">EUROPEAN PATENT OFFICE</div>	Signature of Authorized Officer <div style="text-align: center;">VAN PUTTEN A.J.</div>	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 93/01294

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos. because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos. because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos. because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see PCT/ISA/206 mailed on 12.08.93

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 15-23(part.)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.